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COMMUNITY NOISE EXPOSURE RESULTING FROM AIRCRAFT OPERATIONS. VO--ETC(U)
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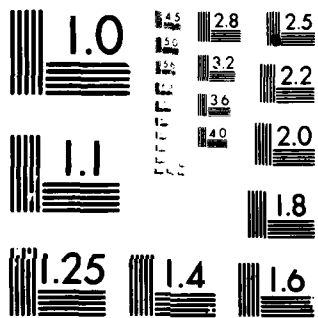
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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2. Author: *John F. Kennedy*
3. Date: *1964*

4. Summary: *This report is a summary of the results of the study conducted by the Food and Drug Administration.*

5. Abstract: *This report is a summary of the results of the study conducted by the Food and Drug Administration.*

6. Introduction

The study was conducted in accordance with the Food and Drug Administration's Food and Drug Administration, National Laboratory Animal Resources, National Research Council.

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The study was conducted in accordance with the Food and Drug Administration's Food and Drug Administration, National Laboratory Animal Resources, National Research Council.

7. Conclusion

John F. Kennedy

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) 4 This report presents the results of field measurements of the far-field noise produced on the ground by military aircraft operating inside Grade-II demountable suppressors during ground runup operations. For these ground runups, data are presented as a function of angle and distance to the aircraft. All of the data are normalized to standard acoustic reference conditions of 59°F temperature and 70% relative humidity. Volume 1 discusses the		

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scope, limitations, and definitions needed to understand and use the volumes containing the noise data.) It provides guidance for making airspeed and engine power setting adjustments to the flight noise data for other than reference conditions as well as work sheets and several examples for computing cumulative noise exposure resulting from multiple flight or ground runup operations. Noise data are presented in this Volume 7 for the following aircraft suppressor systems: A-7 in the AF32A-19 and AF32A-24 noise suppressors, KC-135A in the modified AF32A-52 noise suppressor, F-4 in the AF32A-14 noise suppressor, F-5 in the AF32A-18 noise suppressor, F-15 in the AF32A-23 noise suppressor, F-16 in the AF32A-25 noise suppressor, F-100 in the AF32A-16 noise suppressor, F-106 in the AF32A-17 noise suppressor, F-111 in the AF32A-13 noise suppressor and T-38 in the AF32A-18 noise suppressor.

The other noise data volumes are categorized according to:

- Vol. 2: Air Force Bomber/Cargo Aircraft
- Vol. 3: Air Force Attack/Fighter Aircraft
- Vol. 4: Air Force Trainer/Fighter Aircraft
- Vol. 5: Air Force Propeller Aircraft
- Vol. 6: Navy Aircraft

PREFACE

The author gratefully acknowledges the many helpful technical discussions and critical reviews of the data acquisition and reduction procedures by Bolt Beranek and Newman Inc. and Mr. John N. Cole, Mr. Jerry D. Speakman and Mr. Robert G. Powell of the Biodynamic Environment Branch; development of the OMEGA software programs by Mr. Henry Mohlman and maintenance of the data files by Mr. Fred Lampley both of the University of Dayton Research Institute, the instrumentation development and noise measurement efforts of Harald K. Hille of the Biodynamic Environment Branch; and the report preparation efforts of Mrs. Norma Peachey of the Biodynamic Environment Branch.

This report is one of a series describing the contractual and in-house research program undertaken by the Aerospace Medical Research Laboratory, Biodynamic Environment Branch, under Project/Task 723107, "Technology to Define and Assess Environmental Quality of Noise from AF Operations," to develop the procedures and acoustic data base required for predicting community noise exposure resulting from aircraft operations.

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INTRODUCTION

This report is one of a series published under the same report number (AMRL-TR-73-110) as a multi-volume databook quantifying the single event, far-field noise produced on the ground by flyover and ground runup operations of military aircraft. A companion report (AMRL-TR-73-107, "Community Noise Exposure Resulting From Aircraft Operations: Acquisition and Analysis of Acoustic Data") describes the test protocol and data reduction algorithms associated with these data.

Volume 1 discusses the scope, definitions, and limitations of the noise data volumes as well as providing work sheets and several examples of making hand computations of noise exposure from multiple flight and/or ground runup operations.

Volume 7 provides the noise characteristics of USAF aircraft in Grade II demountable suppressors during ground runup operations.

OMEGA 8.2 output pages show the expected far-field noise levels for single engine operation of the various aircraft operating inside the noise suppressors during ground runup operations. Distances and angles to the far-field noise data locations are measured from a point of origin located on the ground directly below the center of the suppressor exhaust stack. The angle is determined by the orientation of the aircraft in the suppressor with the aircraft nose representing 0° and the aircraft exhaust representing 180° .

The other noise data volumes are categorized according to:

- Vol. 2: Air Force Bomber/Cargo Aircraft Noise
- Vol. 3: Air Force Attack/Fighter Aircraft Noise Data
- Vol. 4: Air Force Trainer/Fighter Aircraft Noise Data
- Vol. 5: Air Force Propeller Aircraft Noise Data
- Vol. 6: Navy Aircraft

Direct any questions concerning the data in this report to: AFAMRL/BBE, Wright-Patterson AFB OH 45433; AUTOVON 785-3664 or 785-3605; Commercial (513) 255-3664 or (513) 255-3605.

[illegible]

NOISE PRODUCED ON THE GROUND BY

A-7 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-833-u01
AIRCRAFT CODE: 833
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 55% RPM	5-10
Engine Runup, 70% RPM	11-16
Engine Runup, 85% RPM	17-22
Military Power, 96% RPM	23-28

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY

NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

PERCEIVED NOISE LEVEL

TONE-CORRECTED, PERCEIVED NOISE LEVEL
 A-WEIGHTED OVERALL SOUND LEVEL

A-WEIGHTED OVERALL SOUND LEVEL
TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AMERICAN AIR FORCE
AEROSPACE MEDICAL
RESERVE LABORATORY

[illegible]

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
OPERATIONS:																			
IDLE PWR, 55% RPM																			
SINGLE ENGINE																			
SUPPRESSED GROUND RUNUP																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
AIRCRAFT CODE 833																			
OPERATION CODE 01013																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE C1																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
RUN 01																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	82	80	77	81	87	83	84	84	83	83	83	79	76	76	76	76	77	80	
63	79	78	78	81	78	80	78	79	79	81	83	82	80	75	73	71	71	76	
80	72	73	74	74	75	76	75	72	71	71	74	76	76	73	69	65	64	66	
100	67	65	67	68	69	68	66	67	70	65	64	67	68	66	65	63	62	65	
125	68	65	70	68	68	67	67	68	68	65	63	64	63	60	60	60	59	63	
160	62	62	68	66	63	65	63	62	62	63	61	62	61	59	60	59	58	61	
200	65	64	65	64	61	63	62	59	61	61	59	61	59	57	61	57	57	59	
250	64	65	65	62	60	61	60	59	60	59	58	59	57	56	58	56	55	58	
315	62	62	61	60	58	60	58	59	57	59	56	56	55	55	56	54	54	56	
400	63	65	65	58	57	58	59	57	58	54	54	56	54	53	54	53	53	54	
500	65	65	63	64	55	56	54	59	58	57	53	54	52	52	52	52	51	53	
630	61	63	60	60	55	57	56	60	55	56	54	55	51	51	50	48	51	51	
800	61	63	61	63	58	59	60	58	60	57	57	58	58	54	53	52	54	49	
1000	58	61	61	63	59	61	60	60	60	59	58	58	57	57	55	52	54	49	
1250	62	67	66	69	62	68	67	68	64	72	66	71	67	68	67	65	68	55	
1600	55	61	61	63	62	65	63	63	63	60	63	63	64	63	60	56	58	52	
2000	55	62	62	62	62	64	63	63	65	61	63	66	60	66	62	60	57	59	
2500	53	62	63	64	63	64	61	62	63	59	60	58	59	60	58	56	58	52	
3150	49	61	60	62	61	62	58	59	59	55	54	54	54	55	53	53	51	55	
4000	49	59	60	61	61	62	59	60	59	54	53	52	52	53	52	51	55	47	
5000	47	58	58	59	59	58	56	57	51	49	48	48	48	50	49	49	51	43	
6300	42	52	53	55	54	55	52	54	53	47	46	45	43	46	47	47	47	48	
8000	40	50	51	52	53	51	52	50	44	44	42	40	41	43	43	43	43	37	
10000	38	46	47	48	49	47	46	47	39	38	37	36	35	39	40	41	48	34	
OVERALL	85	84	83	85	88	85	86	86	85	86	86	85	83	80	80	79	79	82	

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:										METEOROLOGY:									
A-7 NOISE SUPPRESSOR										TEMP = 59 F									
AF32A-19										IDLE PMR, 55% KPM									
										SINGLE ENGINE									
										SUPPRESSED GROUND RUNUP									
										DELTA M = 0.0 DB									
										ANGLE (DEGREES)									
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.7	89.8	90.0	90.8	90.1	90.7	88.8	89.4	89.6	86.8	88.5	88.3	87.9	87.6	85.7	84.8	83.0	84.8	81.1
250	83.2	87.5	87.7	88.5	87.6	88.4	86.5	87.0	87.3	84.5	86.2	86.0	85.6	85.4	83.4	82.5	80.7	82.6	78.5
315	80.7	85.1	85.3	86.2	85.2	86.0	84.1	84.7	85.3	82.2	83.9	83.7	83.3	83.1	81.1	80.2	78.4	80.3	76.8
438	78.1	82.7	82.9	83.8	82.7	83.6	81.7	82.3	82.6	79.8	81.6	81.3	81.0	80.7	78.8	77.9	76.0	77.9	73.4
530	75.7	80.2	80.4	81.3	80.2	81.1	79.2	79.7	80.1	77.3	79.2	78.9	78.6	78.3	76.4	75.5	73.6	75.5	70.8
630	73.2	77.6	77.8	78.6	77.5	78.5	76.6	77.1	77.5	74.8	76.7	76.4	76.2	75.8	73.9	73.0	71.1	73.0	68.1
800	70.7	74.9	75.0	75.9	74.7	75.7	73.9	74.4	74.8	72.1	74.2	73.8	73.6	73.2	71.3	70.4	68.4	70.4	65.2
1000	68.0	72.0	72.2	73.0	71.8	72.8	71.1	71.5	72.0	69.3	71.5	70.9	71.0	70.3	68.5	67.6	65.6	67.6	62.2
1250	65.2	69.9	70.0	70.9	69.6	70.7	68.8	69.3	69.9	67.2	69.6	69.0	68.1	67.3	65.5	64.6	62.5	64.6	59.9
1600	62.1	66.5	66.5	67.5	66.1	67.2	64.6	64.9	65.6	62.9	65.5	64.6	64.9	64.0	62.3	61.3	59.2	61.3	56.3
2000	59.7	64.1	64.1	65.1	63.7	64.8	61.8	61.1	61.8	59.0	62.0	60.9	61.5	60.2	58.7	57.7	55.6	57.8	50.7
2500	57.0	61.4	61.4	62.4	61.0	62.1	59.6	58.9	59.8	57.0	59.2	58.2	58.6	57.6	56.1	54.8	53.8	55.8	48.6
3150	54.8	59.2	59.2	60.2	58.8	59.9	57.2	56.5	57.4	54.6	56.9	56.0	56.4	55.4	53.2	52.2	50.0	52.2	45.6
4000	52.0	56.4	56.4	57.4	56.0	57.1	54.4	53.7	54.6	51.8	54.1	53.2	53.6	52.6	50.4	49.4	47.2	49.4	42.8
5000	49.5	53.9	53.9	54.9	53.5	54.6	51.9	51.2	52.1	49.3	51.6	50.7	51.1	50.1	47.9	46.9	44.7	46.9	40.2
6300	47.0	51.4	51.4	52.4	51.0	52.1	49.4	48.7	49.6	46.8	49.1	48.2	48.6	47.6	45.4	44.4	42.2	44.4	37.6
8000	44.5	48.9	48.9	49.9	48.5	49.6	46.9	46.2	47.1	44.3	46.6	45.7	46.1	45.1	42.9	41.9	39.7	41.9	35.0
10000	42.0	46.4	46.4	47.4	46.0	47.1	44.4	43.7	44.6	41.8	44.1	43.2	43.6	42.6	40.4	39.4	37.2	39.4	32.4
12500	39.5	43.9	43.9	44.9	43.5	44.6	41.8	41.1	42.0	39.2	41.5	40.6	41.0	40.0	37.8	36.8	34.6	36.8	29.8
16000	37.0	41.4	41.4	42.4	41.0	42.1	39.4	38.7	39.6	36.8	39.1	38.2	38.6	37.6	35.4	34.4	32.2	34.4	27.3
20000	34.5	38.9	38.9	39.9	38.5	39.6	36.8	36.1	37.0	34.2	36.5	35.6	36.0	35.0	32.8	31.8	29.6	31.8	24.8
25000	32.0	36.4	36.4	37.4	36.0	37.1	34.3	33.6	34.5	31.7	34.0	33.1	33.5	32.5	30.3	29.3	27.1	29.3	22.3
100000	29.5	33.9	33.9	34.9	33.5	34.6	31.8	31.1	32.0	29.2	31.5	30.6	31.0	30.0	27.8	26.8	24.6	26.8	19.3
125000	27.0	31.4	31.4	32.4	31.0	32.1	29.4	28.7	29.6	26.8	29.1	28.2	28.6	27.6	25.4	24.4	22.2	24.4	16.8
160000	24.5	28.9	28.9	29.9	28.5	29.6	26.9	26.2	27.1	24.3	26.6	25.7	26.1	25.1	22.9	21.9	19.7	21.9	13.8
200000	22.0	26.4	26.4	27.4	26.0	27.1	24.3	23.6	24.5	21.7	24.0	23.1	23.5	22.5	20.3	19.3	17.1	19.3	11.3
250000	19.5	23.9	23.9	24.9	23.5	24.6	21.8	21.1	22.0	19.2	21.5	20.6	21.0	20.0	17.8	16.8	14.6	16.8	9.3
1000000	17.0	21.4	21.4	22.4	21.0	22.1	19.4	18.7	19.6	16.8	19.1	18.2	18.6	17.6	15.4	14.4	12.2	14.4	6.8
1250000	14.5	18.9	18.9	19.9	18.5	19.6	16.9	16.2	17.1	14.3	16.6	15.7	16.1	15.1	12.9	11.9	9.7	11.9	3.7
1600000	12.0	16.4	16.4	17.4	16.0	17.1	14.4	13.7	14.6	11.8	14.1	13.2	13.6	12.6	10.4	9.4	7.2	9.4	1.2
2000000	9.5	13.9	13.9	14.9	13.5	14.6	11.8	11.1	12.0	9.2	11.5	10.6	11.0	10.0	7.8	6.8	4.6	6.8	0.9
2500000	7.0	11.4	11.4	12.4	11.0	12.1	9.4	8.7	9.6	6.8	9.1	8.2	8.6	7.6	5.4	4.4	2.2	4.4	0.9

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
(OPERATION:																			
(IDLE PWR, 55% RPM																			
(SINGLE ENGINE																			
(SUPPRESSED GROUND RUNUP																			
) METEOROLOGY:																			
) TEMP = 59 F																			
) BAR PRESS =29.92 IN HG																			
) REL HUMID = 70 %																			
) DELTA N = J.0 DB																			
) AIRCRAFT CODE 833																			
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TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
(OPERATION:)																			
(IDLE PMR, 55% RPM)																			
(SINGLE ENGINE)																			
(SUPPRESSED GROUND RUNUP)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
RUN 01																			
AIRCRAFT CODE 033																			
OPERATION CODE 01013																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE F1																			
DISTANCE																			
ANGLE (DEGREES)																			
(FEET)	U	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	71.8	75.7	75.1	76.8	74.3	76.5	74.8	75.1	75.8	72.4	76.4	74.3	75.6	74.5	73.7	72.3	70.3	72.8	65.2
250	69.7	73.5	72.9	74.6	72.1	74.3	72.6	73.0	73.7	70.2	74.2	72.2	73.5	72.4	71.6	70.2	68.1	70.6	63.1
315	67.6	71.3	70.7	72.4	69.9	72.1	70.4	70.7	71.5	68.1	72.1	70.0	71.4	70.3	69.4	68.0	66.0	68.5	61.0
400	65.5	69.1	68.5	70.2	67.6	69.9	68.2	68.5	69.3	65.9	69.9	67.8	69.2	68.1	67.2	65.8	63.8	66.3	58.8
500	63.3	66.8	66.2	67.9	65.2	67.6	65.9	66.2	67.0	63.6	67.7	65.5	67.0	65.8	64.9	63.6	61.5	64.0	56.6
630	61.1	64.5	63.8	65.5	62.8	65.2	63.5	63.8	64.6	61.3	65.4	63.2	64.7	63.5	62.6	61.3	59.2	61.7	54.3
800	58.8	62.1	61.3	63.1	60.3	62.7	61.1	61.4	62.2	58.9	63.1	60.8	62.4	61.1	60.2	58.9	56.8	59.3	51.9
1000	56.5	59.7	58.8	60.6	57.7	60.2	58.6	58.8	59.7	56.4	60.7	58.3	60.0	58.6	57.8	56.4	54.4	56.8	49.5
1250	54.1	57.1	56.1	57.9	54.9	57.5	55.9	56.2	57.1	53.8	58.1	55.7	57.4	56.0	55.2	53.8	51.8	54.2	46.9
1600	51.5	54.4	53.3	55.2	52.0	54.6	53.2	53.4	54.3	51.1	55.5	52.9	54.8	53.2	52.4	51.1	49.1	51.5	44.2
2000	48.8	51.6	50.4	52.3	48.9	51.6	50.2	50.4	51.4	48.1	52.6	50.0	51.9	50.2	49.5	48.2	46.2	48.7	41.2
2500	45.9	48.5	47.3	49.2	45.5	48.4	47.0	47.3	48.3	44.9	49.5	46.7	48.9	47.0	46.4	45.1	43.1	45.6	37.9
3150	42.6	45.2	43.9	45.9	41.9	45.0	43.6	43.8	44.9	41.4	46.2	43.2	45.6	43.5	43.0	41.7	39.7	42.3	36.3
4000	39.0	41.6	40.2	42.3	38.1	41.2	39.9	40.0	41.2	37.7	42.6	39.4	41.9	39.7	39.3	38.1	36.1	38.6	30.4
5000	34.9	37.5	36.1	38.2	33.8	37.1	35.8	35.9	37.1	33.5	38.6	35.2	38.0	35.5	35.2	34.0	32.1	34.6	26.1
6300	30.6	33.1	31.7	33.8	29.2	32.5	31.3	31.4	32.6	29.0	34.2	30.6	33.5	30.9	30.7	29.5	27.6	30.1	21.5
8000	26.7	28.9	27.3	29.3	24.7	27.7	26.7	26.7	28.0	24.5	29.3	25.8	28.6	25.8	25.7	24.6	22.7	25.2	17.5
13000	22.5	24.4	22.7	24.5	20.0	23.5	21.6	21.7	22.9	19.7	23.8	20.6	23.2	20.3	20.1	19.1	17.3	19.7	13.4
12500	18.1	19.6	17.7	19.2	15.3	18.9	16.3	16.4	17.6	14.8	17.8	15.3	17.3	14.4	14.1	13.1	11.4	13.5	9.3
16000	13.4	14.5	12.5	13.8	10.9	13.4	11.0	11.2	12.1	10.0	11.6	10.3	11.3	8.7	7.8	6.9	5.4	6.9	5.4
20000	8.5	9.2	7.3	8.5	7.1	8.4	6.3	6.5	7.0	5.8	6.3	6.1	6.1	3.8	2.0	1.3			1.8
25000	3.8	3.9	2.4	3.6	4.0	2.3	2.6	2.5	2.7	2.2	2.4	2.8	2.2						

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

[illegible]

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 A-7 NOISE SUPPRESSOR
 AF32A-19
 IDENTIFICATION:
 OMEGA 8.2
 TEST 77-833-001
 RUN 81
 AIRCRAFT CODE 833
 OPERATION CODE 01013
 PROFILE VERSION A
 28 NOV 79
 PAGE J1
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB

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TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																
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DISTANCE = 250 FEET																
NOISE SOURCE/SUBJECT:																
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(AF32A-19																
(SINGLE ENGINE																
(SUPPRESSED GROUND RUNUP																
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TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																		
NOISE SOURCE/SUBJECT:																		
A-7 NOISE SUPPRESSOR																		
AF32A-19																		
OPERATION:																		
702 RPM, ENGINE RUNUP																		
SINGLE ENGINE																		
SUPPRESSED GROUND RUNUP																		
METEOROLOGY:																		
TEMP = 59 F																		
BAR PRESS = 29.92 IN HG																		
REL HUMID = 70 %																		
DELTA N = 0.0 DB																		
IDENTIFICATION:																		
OMEGA 8.2																		
TEST 77-833-001																		
RUN 02																		
AIRCRAFT CODE 833																		
OPERATION CODE 01021																		
PROFILE VERSION A																		
28 NOV 79																		
PAGE E2																		
ANGLE (DEGREES)																		
DISTANCE (FEET)																		
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.8	96.2	98.4	97.9	97.9	96.8	95.5	97.1	94.9	96.2	96.8	94.5	94.8	95.6	91.9	90.1	87.9	90.4
250	93.6	94.0	96.2	95.7	94.8	94.6	93.3	94.9	92.8	94.0	94.6	92.4	92.6	93.3	89.7	87.8	85.6	88.1
315	91.3	91.8	94.0	93.5	92.5	92.3	91.1	92.7	90.6	91.8	92.5	90.2	90.3	91.8	87.4	85.5	83.2	85.8
400	88.9	89.5	91.7	91.1	90.0	89.9	88.8	90.4	88.3	89.6	90.2	88.0	87.8	88.7	85.0	83.1	80.8	83.4
500	86.4	86.9	89.3	88.6	87.5	87.4	86.4	87.9	85.8	87.3	88.0	85.8	85.4	86.2	82.6	80.6	78.3	80.9
630	83.9	84.3	86.6	86.0	84.9	84.8	83.7	85.2	83.2	84.8	85.5	83.2	83.2	83.7	80.1	78.1	75.7	78.4
800	81.3	81.6	83.8	83.3	82.2	82.0	80.9	82.4	80.4	82.8	83.2	80.5	80.2	81.1	77.5	75.5	73.1	75.7
1000	78.6	78.8	81.0	80.5	79.4	79.1	78.1	79.6	77.6	79.2	80.0	77.7	77.5	78.3	74.7	72.7	70.2	72.9
1250	75.3	75.8	77.9	77.2	76.1	76.1	75.1	76.6	74.5	76.2	77.1	74.7	74.1	75.3	71.8	69.6	67.2	69.8
1600	71.7	72.1	74.2	73.5	72.5	72.8	71.2	72.9	70.7	72.4	73.2	70.8	70.4	72.1	68.5	66.3	63.8	66.5
2000	67.9	68.1	70.1	69.4	68.9	69.2	67.0	69.4	68.5	68.1	68.9	66.4	66.2	68.5	65.0	62.6	59.9	62.7
2500	64.2	63.9	65.8	65.3	64.8	65.2	62.7	65.3	64.2	63.3	64.1	61.7	62.1	64.4	61.1	58.4	55.6	58.4
3150	60.0	59.8	61.2	60.8	60.3	60.9	58.2	60.9	57.7	58.0	59.5	56.2	57.6	59.9	56.5	53.7	50.4	53.6
4000	55.8	54.9	55.6	55.8	55.4	55.7	52.9	55.4	52.2	52.4	53.9	50.5	52.1	54.1	51.4	48.8	43.9	47.1
5000	49.6	49.4	49.1	49.9	48.9	49.9	46.4	49.2	45.9	45.7	47.4	43.8	45.2	47.6	44.2	40.7	36.4	39.1
6300	42.4	42.8	42.0	43.3	41.3	42.0	38.8	41.6	38.1	37.8	39.7	36.3	37.1	39.3	37.3	33.3	27.6	31.0
8000	37.2	36.9	36.0	37.7	33.7	35.0	31.0	33.1	29.0	28.8	31.3	28.5	31.1	31.6	29.2	23.4	16.9	22.6
14000	34.1	30.1	27.4	30.3	23.8	24.0	20.9	20.8	16.5	18.3	19.6	17.9	20.0	22.5	16.3	13.5	6.2	8.4
12500	21.8	22.2	16.2	20.1	9.3	10.2	10.7	8.7	4.3	7.9	8.2	7.4	10.0	7.3	3.3	3.6		
16000	7.4	9.9	5.1	9.8			.6						.1					
20000																		
25000																		

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 A-7 NOISE SUPPRESSOR
 AF32A-19
 OPERATIONS:
 70% RPM, ENGINE RUNUP
 SINGLE ENGINE
 SUPPRESSED GROUND RUNUP
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 IDENTIFICATION:
 OMEGA 8.2
 TEST 77-833-801
 RUN 82
 AIRCRAFT CODE 833
 OPERATION CODE 01021
 PROFILE VERSION A
 28 NOV 79
 PAGE J2

	NOISE LEVEL IN PND8 OR DBA										
	0	10	20	30	40	50	60	70	80	90	100
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

A N G L E I N D E G R E E S

TABLE 1 TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT:																
A-7 NOISE SUPPRESSOR																
AF32A-19																
OPERATION:																
852 RPM, ENGINE RUNUP																
SINGLE ENGINE																
SUPPRESSED GROUND RUNUP																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 3.0 DB																
IDENTIFICATION:																
OMEGA 8.2																
TEST 77-833-001																
RUN 03																
AIRCRAFT CODE 833																
OPERATION CODE 01018																
PROFILE VERSION A																
28 NOV 79																
PAGE E3																
ANGLE (DEGREES)																
DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
(FEET)																
200	108.7	111.1	113.8	116.6	119.1	121.9	124.7	127.5	130.3	133.1	135.9	138.7	141.5	144.3	147.1	149.9
250	106.5	109.0	111.5	114.0	116.5	119.0	121.5	124.0	126.5	129.0	131.5	134.0	136.5	139.0	141.5	144.0
315	104.4	106.8	109.2	111.6	114.0	116.4	118.8	121.2	123.6	126.0	128.4	130.8	133.2	135.6	138.0	140.4
400	102.2	104.6	106.9	109.2	111.5	113.8	116.1	118.4	120.7	123.0	125.3	127.6	129.9	132.2	134.5	136.8
500	100.0	102.3	104.6	106.9	109.2	111.5	113.8	116.1	118.4	120.7	123.0	125.3	127.6	129.9	132.2	134.5
630	97.4	99.7	102.0	104.3	106.6	108.9	111.2	113.5	115.8	118.1	120.4	122.7	125.0	127.3	129.6	131.9
800	94.8	97.1	99.4	101.7	104.0	106.3	108.6	110.9	113.2	115.5	117.8	120.1	122.4	124.7	127.0	129.3
1000	91.9	94.2	96.5	98.8	101.1	103.4	105.7	108.0	110.3	112.6	114.9	117.2	119.5	121.8	124.1	126.4
1250	88.9	91.2	93.5	95.8	98.1	100.4	102.7	105.0	107.3	109.6	111.9	114.2	116.5	118.8	121.1	123.4
1600	85.6	87.9	90.2	92.5	94.8	97.1	99.4	101.7	104.0	106.3	108.6	110.9	113.2	115.5	117.8	120.1
2000	81.9	84.2	86.5	88.8	91.1	93.4	95.7	98.0	100.3	102.6	104.9	107.2	109.5	111.8	114.1	116.4
2500	77.7	80.0	82.3	84.6	86.9	89.2	91.5	93.8	96.1	98.4	100.7	103.0	105.3	107.6	109.9	112.2
3150	73.4	75.7	78.0	80.3	82.6	84.9	87.2	89.5	91.8	94.1	96.4	98.7	101.0	103.3	105.6	107.9
4000	68.7	71.0	73.3	75.6	77.9	80.2	82.5	84.8	87.1	89.4	91.7	94.0	96.3	98.6	100.9	103.2
5000	63.6	65.9	68.2	70.5	72.8	75.1	77.4	79.7	82.0	84.3	86.6	88.9	91.2	93.5	95.8	98.1
6300	58.3	60.6	62.9	65.2	67.5	69.8	72.1	74.4	76.7	79.0	81.3	83.6	85.9	88.2	90.5	92.8
8000	54.1	56.4	58.7	61.0	63.3	65.6	67.9	70.2	72.5	74.8	77.1	79.4	81.7	84.0	86.3	88.6
10000	49.0	51.3	53.6	55.9	58.2	60.5	62.8	65.1	67.4	69.7	72.0	74.3	76.6	78.9	81.2	83.5
12500	43.4	45.7	48.0	50.3	52.6	54.9	57.2	59.5	61.8	64.1	66.4	68.7	71.0	73.3	75.6	77.9
16000	37.4	39.7	42.0	44.3	46.6	48.9	51.2	53.5	55.8	58.1	60.4	62.7	65.0	67.3	69.6	71.9
20000	30.8	33.1	35.4	37.7	40.0	42.3	44.6	46.9	49.2	51.5	53.8	56.1	58.4	60.7	63.0	65.3
25000	21.5	23.8	26.1	28.4	30.7	33.0	35.3	37.6	39.9	42.2	44.5	46.8	49.1	51.4	53.7	56.0

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																					
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																					
NOISE SOURCE/SUBJECT:																					
A-7 NOISE SUPPRESSOR																					
AF32A-19																					
IDENTIFICATION:																					
OMEGA 8.2																					
TEST 77-833-001																					
METEOROLOGY:																					
TEMP = 59 F																					
BAR PRESS = 29.92 IN HG																					
REL HUMID = 70 %																					
DELTA N = 0.0 DB																					
AIRCRAFT CODE 833																					
OPERATION CODE 01018																					
PROFILE VERSION A																					
20 NOV 79																					
PAGE F3																					
ANGLE (DEGREES)																					
DISTANCE (FEET)																					
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		
200	94.1	96.4	94.5	95.9	95.0	93.9	90.9	91.4	89.4	87.6	87.6	86.0	86.5	86.4	87.8	88.9	84.0	82.3	79.5		
250	92.1	94.3	92.4	93.7	92.8	91.7	88.7	89.2	87.3	85.4	85.4	85.9	86.3	86.3	85.7	86.7	81.8	80.1	77.4		
315	90.8	92.2	90.3	91.6	90.7	89.5	86.5	87.0	85.1	83.3	83.3	83.7	84.2	84.1	83.5	84.5	79.7	78.0	75.2		
400	87.9	90.1	88.1	89.4	88.4	87.3	84.3	84.8	82.9	81.1	81.1	81.5	82.0	81.9	81.3	82.3	77.5	75.8	73.0		
500	85.8	87.9	85.9	87.1	86.2	84.9	82.8	82.5	80.7	78.8	78.8	79.2	79.7	79.7	79.1	80.1	75.2	73.5	70.8		
630	83.5	85.6	83.5	84.8	83.8	82.6	79.6	80.2	78.3	76.5	76.5	76.9	77.4	77.4	76.8	77.7	72.9	71.2	68.5		
800	81.1	83.2	81.0	82.4	81.3	80.1	77.1	77.7	75.8	74.1	74.1	74.5	75.0	75.0	74.4	75.3	70.4	68.8	66.1		
1000	78.6	80.8	78.4	79.9	78.8	77.5	74.5	75.1	73.3	71.6	71.6	72.1	72.6	72.5	71.9	72.8	67.9	66.3	63.7		
1250	76.8	78.2	75.6	77.3	76.1	74.8	71.8	72.5	70.6	69.0	69.0	69.5	70.0	70.0	69.4	70.2	65.3	63.8	61.1		
1500	73.3	75.5	72.7	74.6	73.3	71.9	68.9	69.6	67.8	66.2	66.2	66.7	67.3	67.3	66.7	67.5	62.6	61.1	58.4		
2000	70.5	72.7	69.6	71.8	70.3	68.9	65.9	66.7	64.9	63.3	63.3	63.9	64.5	64.5	63.9	64.7	59.7	58.3	55.6		
2500	67.4	69.5	66.3	68.8	67.1	65.6	62.7	63.5	61.7	60.3	60.3	60.8	61.4	61.4	60.9	61.6	56.7	55.2	52.5		
3150	64.0	66.1	62.7	65.5	63.7	62.1	59.3	60.1	58.3	57.0	57.0	57.5	58.2	58.2	57.6	58.3	53.4	52.0	49.2		
4000	60.3	62.3	58.7	61.9	60.0	58.3	55.6	56.5	54.7	53.4	53.4	53.9	54.7	54.7	54.1	54.8	49.8	48.4	45.7		
5000	56.3	58.2	54.5	57.9	55.9	54.2	51.6	52.5	50.7	49.5	49.5	50.0	50.8	50.8	50.2	50.8	45.9	44.5	41.7		
6300	52.8	53.8	50.1	53.5	51.4	49.7	47.2	48.2	46.3	45.2	45.1	45.6	46.4	46.6	45.9	46.5	41.5	40.2	37.5		
8000	48.1	49.9	46.1	49.4	46.8	45.1	42.6	43.7	41.8	40.7	40.5	41.0	42.0	42.1	41.3	41.9	37.8	35.8	33.2		
10000	43.9	45.7	41.9	44.9	41.8	40.1	37.7	38.7	36.9	35.7	35.5	35.9	37.0	37.1	36.2	36.8	32.0	31.0	28.6		
12500	39.3	41.2	37.5	40.8	36.4	34.7	32.3	33.4	31.6	30.3	29.9	30.4	31.5	31.6	30.6	31.3	26.5	25.7	23.5		
15000	34.3	36.4	32.9	34.8	30.7	28.8	26.4	27.6	25.9	24.4	23.8	24.3	25.5	25.5	24.4	25.1	20.5	19.9	18.1		
20000	29.8	31.2	28.0	29.1	24.7	22.6	20.4	21.6	20.0	18.2	17.5	17.8	18.9	19.0	17.9	18.6	14.1	13.8	12.6		
25000	23.6	25.7	23.0	23.0	18.7	16.2	14.4	15.8	14.2	12.3	11.4	11.3	12.1	12.3	11.5	12.1	7.8	7.6	7.3		

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
OPERATIONS:																			
85% RPM, ENGINE RUNUP																			
SINGLE ENGINE																			
SUPPRESSED GROUND RUNUP																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
RUN 03																			
AIRCRAFT CODE 833																			
OPERATION CODE 01018																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 63																			
ANGLE (DEGREES)																			
DISTANCE (FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.4	97.6	96.1	97.3	96.6	95.5	92.1	92.6	90.2	88.5	88.3	88.7	88.5	89.6	87.8	89.6	85.0	82.3	79.5
250	93.3	95.5	94.0	95.2	94.4	93.3	90.0	90.4	88.1	86.4	86.2	86.6	86.3	87.5	85.7	87.5	82.9	80.1	77.4
315	91.3	93.4	91.9	93.0	92.3	91.1	87.8	88.3	85.9	84.2	84.0	84.4	84.2	85.4	83.5	85.3	80.7	78.0	75.2
400	89.2	91.3	89.7	90.8	90.0	88.9	85.6	86.1	83.7	82.0	81.8	82.2	82.0	83.2	81.3	83.1	78.5	75.8	73.0
500	87.0	89.1	87.5	88.6	87.8	86.6	83.3	83.8	81.4	79.8	79.5	80.0	79.7	80.9	79.1	80.8	76.3	73.5	70.8
630	84.7	86.8	85.1	86.2	85.4	84.2	80.9	81.4	79.0	77.4	77.2	77.7	77.4	78.6	76.8	78.5	73.9	71.2	68.5
800	82.3	84.4	82.5	83.8	82.9	81.7	78.4	78.9	76.6	75.0	74.8	75.3	75.0	76.2	74.4	76.1	71.5	68.8	66.1
1000	79.9	82.0	79.9	81.4	80.4	79.1	75.8	76.4	74.1	72.5	72.3	72.8	72.6	73.8	71.9	73.6	69.0	66.3	63.7
1250	77.3	79.4	77.1	78.8	77.7	76.4	73.1	73.7	71.4	69.9	69.7	70.2	70.0	71.2	69.4	71.0	66.4	63.8	61.1
1500	74.5	76.7	74.2	76.1	74.9	73.5	70.2	70.9	68.6	67.2	67.0	67.5	67.3	68.5	66.7	68.3	63.7	61.1	58.4
2000	71.7	73.9	71.2	73.3	71.9	70.5	67.2	67.9	65.6	64.3	64.1	64.6	64.5	65.7	63.9	65.4	60.8	58.3	55.6
2500	68.6	70.7	67.8	70.3	68.7	67.3	64.0	64.7	62.5	61.2	61.1	61.5	61.4	62.7	60.9	62.4	57.7	55.2	52.5
3150	65.2	67.3	64.2	67.0	65.3	63.8	60.6	61.4	59.1	57.9	57.7	58.2	58.2	59.5	57.6	59.1	54.4	52.0	49.2
4000	61.3	63.3	60.0	63.1	61.2	59.7	56.6	57.5	55.3	54.2	54.0	54.5	54.7	55.7	54.1	55.4	50.7	48.4	45.7
5000	57.0	58.9	55.5	58.8	56.8	55.2	52.3	53.2	51.1	50.1	49.9	50.4	50.8	51.6	50.2	51.3	46.5	44.5	41.7
6300	52.5	54.3	50.7	54.1	52.0	50.4	47.7	48.6	46.6	45.5	45.4	45.9	46.4	47.1	45.9	46.8	41.9	40.2	37.5
8000	48.3	50.2	46.4	49.7	47.1	45.4	42.9	43.9	42.0	40.8	40.7	41.1	42.0	42.3	41.3	42.1	37.2	35.8	33.2
10000	43.9	45.7	41.9	44.9	41.8	40.1	37.7	38.7	36.9	35.7	35.5	35.9	37.0	37.1	36.2	36.8	32.0	31.0	28.6
12500	39.3	41.2	37.5	40.0	36.4	34.7	32.3	33.4	31.6	30.3	29.9	30.4	31.5	31.6	30.6	31.3	26.5	25.7	23.5
16000	34.3	36.4	32.9	34.8	30.7	28.8	26.4	27.6	25.9	24.4	23.8	24.3	25.5	25.5	24.4	25.1	20.5	19.9	18.1
20000	29.0	31.2	28.8	29.1	24.7	22.6	20.4	21.6	20.0	18.2	17.5	17.8	18.9	19.0	17.9	18.6	14.1	13.8	12.6
25000	23.6	25.7	23.0	23.0	18.7	16.2	14.4	15.8	14.2	12.3	11.4	11.3	12.1	12.3	11.5	12.1	7.0	7.6	7.3

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

A-7 NOISE SUPPRESSOR

AF32A-19

IDENTIFICATIONS:

OMEGA 8.2

TEST 77-833-001

RUN 03

AIRCRAFT CODE 033

OPERATION CODE 01018

PROFILE VERSION A

26 NOV 79

PAGE J3

METEOROLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 70 %

DELTA N = 0.0 DB

	P=PNLT										T=ALT									
	A=AL																			
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200

A N G L E I N D E G R E E S

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																
1/3 OCTAVE BAND																
DISTANCE = 250 FEET																
NOISE SOURCE/SUBJECT:																
A-7 NOISE SUPPRESSOR																
AF32A-19																
OPERATION:																
MILITARY POWER, 96% RPM																
SINGLE ENGINE																
SUPPRESSED GROUND RUNUP																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 73 %																
DELTA N = 0.0 DB																
IDENTIFICATION:																
OMEGA 8.2																
TEST 77-833-001																
RUN 04																
AIRCRAFT CODE 833																
OPERATION CODE 01004																
PROFILE VERSION A																
28 NOV 79																
PAGE C4																
BAND CENTER																
FREQ (HZ)																
ANGLE (DEGREES)																
J 7J 8J 9J 10J 11J 12J 13J 14J 15J 16J 17J 18J																
50	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
63	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
80	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81
100	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
125	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
160	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
200	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
250	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81
315	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
400	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
500	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
630	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
800	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
1000	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
1250	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
1600	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
2000	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
2500	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
3150	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
4000	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
5000	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
6300	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
8000	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
10000	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
OVERALL	98	99	99	98	97	96	96	96	96	95	95	94	93	93	91	91

TABLE:	PERCEIVED NOISE LEVEL (PNDB)	AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																IDENTIFICATIONS:					
(	(																	(	OMEGA	8.2			
(	(																	(	TEST 77-833-001				
(	(																	(	RUN	84			
(	(																	(	AIRCRAFT	CODE 833			
(((OPERATION	CODE 81004			
(((BAR PRESS	= 29.92 IN HG			
(((REL HUMID	= 70 %			
(((DELTA N	= 0.0 DB			
(((PAGE	D4			
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TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
OPERATION:																			
MILITARY POWER, 96% RPM																			
SINGLE ENGINE																			
SUPPRESSED GROUND RUNUP																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
AIRCRAFT CODE 833																			
OPERATION CODE 01004																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE E4																			
ANGLE (DEGREES)																			
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.9	110.8	111.8	110.8	109.8	106.9	107.8	107.1	106.3	104.7	106.5	105.2	105.8	105.1	106.8	103.6	100.8	100.6	95.9
250	105.8	108.6	109.5	108.6	107.6	104.7	105.6	104.9	104.1	102.5	104.3	103.0	103.5	102.8	104.6	101.4	98.5	98.4	93.6
315	103.6	106.4	107.2	106.3	105.3	102.4	103.4	102.6	101.7	100.3	102.0	100.7	101.2	100.5	102.2	99.6	96.2	96.1	91.2
400	101.4	104.2	104.7	104.0	103.0	100.0	101.0	100.2	99.2	98.0	99.7	98.3	98.8	98.1	99.8	96.6	93.8	93.7	88.8
500	99.1	101.8	102.2	101.5	100.5	97.5	98.5	97.8	96.7	95.6	97.2	95.9	96.4	95.6	97.3	94.0	91.3	91.2	86.3
630	96.7	99.4	99.6	99.0	97.9	95.0	96.4	95.2	94.1	93.1	94.6	93.3	93.8	93.0	94.6	91.4	88.7	88.6	83.6
800	94.3	96.9	96.9	96.2	95.2	92.4	93.3	92.5	91.4	90.5	91.9	90.6	91.1	90.3	91.9	88.7	85.9	85.9	80.9
1000	91.7	94.4	94.4	93.4	92.4	89.6	90.4	89.6	88.5	87.8	89.1	87.7	88.2	87.4	89.0	85.8	83.0	83.0	78.1
1250	89.1	91.6	91.1	90.3	89.4	86.6	87.3	86.6	85.5	84.9	86.0	84.7	85.2	84.4	86.0	82.8	80.0	80.0	75.1
1500	86.3	88.8	88.1	87.0	86.2	83.5	84.0	83.4	82.3	81.9	82.9	81.5	81.9	81.1	82.8	79.6	76.7	76.7	71.9
2000	83.3	85.8	85.0	83.5	82.7	80.1	80.4	80.0	78.8	78.6	79.4	78.1	78.3	77.7	79.3	76.1	73.2	73.2	68.5
2500	79.5	82.0	81.1	79.8	78.9	76.4	76.8	76.3	75.1	75.0	75.8	74.4	74.3	74.0	75.5	72.2	69.2	69.2	64.5
3150	75.2	77.6	77.0	76.0	74.7	72.3	72.8	72.1	70.9	71.0	71.8	70.3	70.3	69.8	71.4	67.9	64.8	64.8	60.1
4000	71.2	73.6	72.4	71.6	69.9	67.6	68.3	67.4	66.3	66.6	67.4	65.6	65.8	65.3	67.0	63.2	59.9	59.9	55.1
5000	64.7	67.8	67.5	66.8	64.9	62.6	63.5	62.4	61.4	61.9	62.6	60.7	61.0	60.6	62.1	58.0	54.5	54.5	49.5
6300	58.8	61.3	62.3	61.6	59.3	57.0	58.2	57.0	56.0	56.6	57.2	55.4	55.5	55.2	56.5	52.2	47.7	47.7	43.2
8000	54.7	57.1	58.1	57.1	54.2	52.0	52.7	51.9	50.6	51.2	51.9	50.2	50.5	50.2	51.2	46.6	41.5	41.5	37.0
10000	50.4	52.5	53.6	52.1	48.9	45.7	46.8	45.6	44.3	44.9	45.9	44.2	44.8	44.0	45.1	40.3	34.5	34.5	31.0
12500	45.2	47.8	48.6	46.4	43.1	39.5	39.6	38.4	37.5	37.8	39.2	37.2	38.0	36.7	38.3	32.9	24.5	24.5	22.2
16000	39.5	42.5	42.6	39.5	36.5	31.9	32.3	30.8	29.6	29.7	31.5	29.5	30.1	29.2	30.4	22.7	12.5	12.5	9.8
20000	33.4	36.8	35.8	32.2	28.9	22.4	22.7	19.3	17.1	19.4	20.2	18.4	16.6	17.4	20.4	7.8	.6	.6	8.3
25000	26.2	29.2	27.7	22.9	17.2	12.8	7.7	7.8	4.6	9.1	9.0	3.3	3.1	5.5	10.3				

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
OPERATION:																			
MILITARY POWER, 96Z RPM																			
SINGLE ENGINE																			
SUPPRESSED GROUND RUNUP																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
AIRCRAFT CODE 633																			
OPERATION CODE 01004																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE F4																			
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.9	96.3	97.6	97.3	96.4	93.9	94.7	93.7	92.7	92.6	93.0	92.2	92.6	92.2	94.0	98.1	85.2	87.1	81.4
250	91.8	94.2	95.5	95.1	94.2	91.7	92.5	91.5	90.6	90.5	91.7	90.1	90.5	90.1	91.8	88.0	84.8	84.9	79.3
315	89.7	92.0	93.3	92.9	92.0	89.5	90.3	89.4	88.4	88.3	89.5	87.9	88.3	87.9	89.6	85.8	81.8	82.0	77.2
400	87.6	89.9	91.1	90.7	89.8	87.3	88.1	87.1	86.1	86.1	87.3	85.7	86.1	85.7	87.3	83.5	79.5	80.5	75.0
500	85.5	87.7	88.8	88.4	87.5	85.1	85.9	84.8	83.9	83.9	85.1	83.4	83.8	83.4	85.0	81.2	77.2	78.3	72.8
630	83.3	85.5	86.5	86.1	85.2	82.7	83.5	82.5	81.5	81.6	82.8	81.1	81.5	81.1	82.7	78.8	74.9	76.0	70.5
800	81.1	83.2	84.1	83.7	82.7	80.3	81.1	80.1	79.1	79.3	80.4	78.7	79.1	78.7	80.2	76.4	72.4	73.6	68.1
1000	78.9	80.9	81.6	81.2	80.2	77.8	78.7	77.6	76.6	76.9	77.9	76.3	76.7	76.2	77.7	73.9	69.9	71.1	65.7
1250	76.5	78.5	79.1	78.7	77.6	75.3	76.1	75.0	74.0	74.4	75.4	73.7	74.1	73.6	75.1	71.2	67.2	68.5	63.1
1600	74.1	76.1	76.5	76.0	74.9	72.6	73.4	72.3	71.3	71.7	72.7	71.0	71.4	70.9	72.4	68.5	64.4	65.9	60.5
2000	71.6	73.6	73.8	73.3	72.0	69.8	70.5	69.5	68.5	69.0	69.9	68.2	68.6	68.1	69.5	65.6	61.5	63.1	57.7
2500	69.5	70.4	70.8	70.3	69.0	66.8	67.5	66.4	65.5	66.0	66.9	65.3	65.6	65.2	66.5	62.5	58.3	60.1	54.6
3150	67.1	68.9	69.4	68.9	67.6	65.4	66.3	65.2	64.3	64.7	65.7	64.0	64.4	63.9	65.2	61.2	57.0	58.9	53.3
4000	64.3	66.0	66.6	66.1	64.8	62.6	63.5	62.4	61.5	61.9	62.9	61.2	61.6	61.1	62.4	58.4	54.2	56.1	50.6
5000	61.3	63.0	63.6	63.1	61.8	59.6	60.5	59.4	58.5	58.9	59.9	58.2	58.6	58.1	59.4	55.4	51.2	53.1	47.6
6300	58.9	60.6	61.2	60.7	59.4	57.2	58.1	57.0	56.1	56.5	57.5	55.8	56.2	55.7	57.0	53.0	48.8	50.7	45.2
8000	56.5	58.2	58.8	58.3	57.0	54.8	55.7	54.6	53.7	54.1	55.1	53.4	53.8	53.3	54.6	50.6	46.4	48.3	42.9
10000	54.1	55.8	56.4	55.9	54.6	52.4	53.3	52.2	51.3	51.7	52.7	51.0	51.4	50.9	52.2	48.2	44.0	45.9	40.5
12500	51.7	53.4	54.0	53.5	52.2	50.0	50.9	49.8	48.9	49.3	50.3	48.6	49.0	48.5	49.8	45.8	41.6	43.5	38.1
16000	49.3	51.0	51.6	51.1	49.8	47.6	48.5	47.4	46.5	46.9	47.9	46.2	46.6	46.1	47.4	43.4	39.2	41.1	35.7
20000	46.9	48.6	49.2	48.7	47.4	45.2	46.1	45.0	44.1	44.5	45.5	43.8	44.2	43.7	45.0	41.0	36.8	38.7	33.3
25000	44.5	46.2	46.8	46.3	45.0	42.8	43.7	42.6	41.7	42.1	43.1	41.4	41.8	41.3	42.6	38.6	34.4	36.3	30.9
31500	42.1	43.8	44.4	43.9	42.6	40.4	41.3	40.2	39.3	39.7	40.7	39.0	39.4	38.9	40.2	36.2	32.0	33.9	28.5
40000	39.7	41.4	42.0	41.5	40.2	38.0	38.9	37.8	36.9	37.3	38.3	36.6	37.0	36.5	37.8	33.8	29.6	31.5	26.1
50000	37.3	39.0	39.6	39.1	37.8	35.6	36.5	35.4	34.5	34.9	35.9	34.2	34.6	34.1	35.4	31.4	27.2	29.1	23.7
63000	34.9	36.6	37.2	36.7	35.4	33.2	34.1	33.0	32.1	32.5	33.5	31.8	32.2	31.7	33.0	29.0	24.8	26.7	21.3
80000	32.5	34.2	34.8	34.3	33.0	30.8	31.7	30.6	29.7	30.1	31.1	29.4	29.8	29.3	30.6	26.6	22.4	24.3	18.9
100000	30.1	31.8	32.4	31.9	30.6	28.4	29.3	28.2	27.3	27.7	28.7	27.0	27.4	26.9	28.2	24.2	20.0	21.9	16.5
125000	27.7	29.4	30.0	29.5	28.2	26.0	26.9	25.8	24.9	25.3	26.3	24.6	25.0	24.5	25.8	21.8	17.6	19.5	14.1
160000	25.3	27.0	27.6	27.1	25.8	23.6	24.5	23.4	22.5	22.9	23.9	22.2	22.6	22.1	23.4	19.4	15.2	17.1	11.7
200000	22.9	24.6	25.2	24.7	23.4	21.2	22.1	21.0	20.1	20.5	21.5	19.8	20.2	19.7	21.0	17.0	12.8	14.7	9.3
250000	20.5	22.2	22.8	22.3	21.0	18.8	19.7	18.6	17.7	18.1	19.1	17.4	17.8	17.3	18.6	14.6	10.4	12.3	6.9
315000	18.1	19.8	20.4	19.9	18.6	16.4	17.3	16.2	15.3	15.7	16.7	15.0	15.4	14.9	16.2	12.2	8.0	9.9	4.5
400000	15.7	17.4	18.0	17.5	16.2	14.0	14.9	13.8	12.9	13.3	14.3	12.6	13.0	12.5	13.8	9.8	5.6	7.5	2.1
500000	13.3	15.0	15.6	15.1	13.8	11.6	12.5	11.4	10.5	10.9	11.9	10.2	10.6	10.1	11.4	7.4	3.2	5.1	0.7
630000	10.9	12.6	13.2	12.7	11.4	9.2	10.1	9.0	8.1	8.5	9.5	7.8	8.2	7.7	9.0	5.0	0.8	2.7	0.3
800000	8.5	10.2	10.8	10.3	9.0	6.8	7.7	6.6	5.7	6.1	7.1	5.4	5.8	5.3	6.6	2.6	0.4	1.3	0.0
1000000	6.1	7.8	8.4	7.9	6.6	4.4	5.3	4.2	3.3	3.7	4.7	3.0	3.4	2.9	4.2	0.2	0.0	0.0	0.0

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-19																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-833-001																			
RUN 04																			
AIRCRAFT CODE 833																			
OPERATION CODE 01004																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 64																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.7	97.1	97.6	97.3	96.4	93.9	94.7	93.7	92.7	92.6	93.8	92.2	92.6	92.2	94.0	90.1	86.7	87.1	81.4
250	92.6	95.0	95.5	95.1	94.2	91.7	92.5	91.5	90.6	90.5	91.7	90.1	90.5	90.1	91.8	88.0	84.5	84.9	79.3
315	90.6	92.9	93.3	92.9	92.0	89.5	90.3	89.4	88.4	88.3	89.5	87.9	88.3	87.9	89.6	85.8	82.3	82.8	77.2
400	88.5	90.7	91.1	90.7	89.8	87.3	88.1	87.1	86.1	86.1	87.3	85.7	86.1	85.7	87.3	83.5	80.1	80.5	75.0
500	86.3	88.6	88.8	88.4	87.5	85.1	85.9	84.8	83.9	83.9	85.1	83.4	83.8	83.4	85.0	81.2	77.8	78.3	72.8
630	84.2	86.3	86.5	86.1	85.2	82.7	83.5	82.5	81.5	81.6	82.8	81.1	81.5	81.1	82.7	78.8	75.4	76.0	70.5
800	82.0	84.1	84.1	83.7	82.7	80.3	81.1	80.1	79.1	79.3	80.4	78.7	79.1	78.7	80.2	76.4	72.9	73.6	68.1
1000	79.7	81.8	81.6	81.2	80.2	77.8	78.7	77.6	76.6	76.9	77.9	76.3	76.7	76.2	77.7	73.9	70.4	71.1	65.7
1250	77.3	79.4	79.1	78.7	77.6	75.3	76.1	75.4	74.4	74.4	75.4	73.7	74.1	73.6	75.1	71.2	67.7	68.5	63.1
1600	74.9	76.9	76.5	76.0	74.9	72.6	73.4	72.3	71.3	71.7	72.7	71.0	71.4	70.9	72.4	68.5	64.9	65.9	60.5
2000	72.4	74.4	73.8	73.3	72.0	69.8	70.5	69.5	68.5	69.0	69.9	68.2	68.6	68.1	69.5	65.6	62.0	63.1	57.7
2500	69.3	71.3	70.8	70.3	69.0	66.8	67.5	66.4	65.5	66.0	66.9	65.3	65.6	65.2	66.5	62.5	58.9	60.1	54.6
3150	65.9	67.8	67.4	67.1	65.7	63.5	64.3	63.2	62.3	62.8	63.7	62.1	62.4	62.0	63.2	59.2	55.5	56.9	51.3
4000	62.0	63.7	63.6	63.5	62.1	60.0	60.7	59.7	58.7	59.3	60.1	58.6	58.9	58.5	59.7	55.6	51.7	53.4	47.7
5000	57.6	59.2	59.4	59.5	58.0	56.0	56.8	55.7	54.8	55.4	56.2	54.7	55.0	54.6	55.7	51.7	47.6	49.5	43.7
6300	53.0	54.5	55.0	55.1	53.6	51.7	52.5	51.4	50.5	51.2	51.9	50.4	50.7	50.3	51.4	47.3	43.1	45.2	39.4
8000	49.1	50.7	51.2	51.1	49.3	47.3	48.0	47.0	46.1	46.7	47.4	46.0	46.3	45.9	46.9	42.8	38.4	40.9	35.2
10000	45.0	46.7	47.2	46.7	44.6	42.5	43.1	42.1	41.2	41.7	42.5	41.2	41.5	41.0	42.0	37.9	33.4	36.2	30.8
12500	40.6	42.4	42.8	42.0	39.6	37.2	37.6	36.8	35.9	36.3	37.1	35.9	36.2	35.7	36.6	32.5	28.0	31.1	25.9
16000	35.8	37.6	38.0	36.8	34.1	31.5	31.7	30.9	30.2	30.3	31.2	30.0	30.3	29.8	30.6	26.6	22.3	25.6	20.8
20000	30.6	32.7	32.7	31.1	28.2	25.3	25.4	24.7	24.0	24.0	24.8	23.7	23.9	23.4	24.2	20.3	16.4	19.6	15.7
25000	24.9	27.1	26.8	24.7	21.9	18.9	18.9	18.3	17.6	17.5	18.1	17.0	17.1	16.7	17.4	13.9	10.8	13.4	10.7

(-----P=PNT A=AL T=ALT-----)

20	30	40	50	60	70	80	90	100	110	120
NOISE LEVEL IN PNOB OR DBA										

[illegible]

NOISE PRODUCED ON THE GROUND BY

A-7 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 78-833-001
AIRCRAFT CODE: 833
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting

Idle Power, 54.4% RPM	30-35
Engine Runup, 70% RPM	36-41
Engine Runup, 85.6% RPM	42-47
Military Power, 97.7% RPM	48-53

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

UNNORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY

NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

PERCEIVED NOISE LEVEL

PERCEIVED NOISE LEVEL
TONE-CORRECTED, PERCEIVED NOISE LEVEL

A-WEIGHTED OVERALL SOUND LEVEL

1. TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AIRIGHT-PATTERSON MEDICAL RESERVE FORCE, TORONTO

A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR

A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR

A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR

A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR
A-7 NOISE SUPPRESSOR

A-7 NOISE SUPPRESSOR

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																				
1/3 OCTAVE BAND																				
DISTANCE = 250 FEET																				
NOISE SOURCE/SUBJECT: (OPERATION) METEOROLOGY:) AIRCRAFT CODE 833																				
(A-7 NOISE SUPPRESSOR)) IDLE POWER (54.4% RPM) = 59 F) OPERATION CODE 08113																				
(AF32A-24)) SINGLE ENGINE) BAR PRESS = 29.92 IN HG) PROFILE VERSION A																				
()) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) 28 NOV 79																				
())) DELTA N = 0.0 DB) PAGE C1																				
BAND CENTER																				
FREQ (HZ)																				
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
56	74	73	72	67	68	70	66	66	63	62	63	66	65	63	61	65	65	65	65	65
63	70	68	67	65	64	61	62	59	64	61	63	63	60	61	62	62	62	62	62	62
80	72	71	72	73	69	68	61	60	58	65	61	59	58	58	58	58	58	58	58	58
100	59	60	63	63	60	59	60	59	56	58	56	55	55	56	56	54	53	53	53	53
125	60	61	63	61	64	60	62	64	62	65	62	58	59	61	59	59	60	60	60	60
160	56	56	57	56	58	54	56	54	52	55	54	51	54	49	50	54	53	53	53	53
200	57	56	57	54	56	55	55	54	53	52	51	52	49	49	50	49	52	52	52	52
250	56	55	54	53	52	51	54	51	49	52	52	49	47	49	48	49	48	48	48	48
315	54	52	52	48	47	47	47	48	47	51	52	45	46	47	46	45	47	47	47	47
400	54	50	52	46	48	49	47	49	46	50	52	45	45	44	46	46	47	47	47	47
500	57	55	58	49	52	49	51	54	49	59	58	49	50	49	49	53	53	53	53	53
630	52	49	51	49	50	50	48	48	48	52	55	50	51	49	49	49	49	49	49	49
800	54	50	50	50	49	51	49	50	48	54	57	52	52	48	49	49	48	48	48	48
1000	53	50	48	51	48	52	48	48	48	54	57	51	54	48	49	49	49	49	49	49
1250	66	59	60	52	56	53	56	55	58	66	63	56	56	53	56	56	63	63	63	63
1600	53	50	50	47	52	50	56	50	52	54	59	50	45	47	48	46	49	49	49	49
2000	51	48	48	45	49	48	49	48	48	52	53	48	45	44	45	44	47	47	47	47
2500	50	47	48	43	46	47	47	47	46	53	52	47	43	44	46	43	47	47	47	47
3150	47	43	44	40	42	43	43	44	43	51	46	43	38	39	41	40	44	44	44	44
4000	49	43	45	34	36	43	43	44	43	50	48	42	32	33	41	40	45	45	45	45
5000	44	40	41	28	30	37	37	38	42	49	48	42	26	27	41	40	45	45	45	45
6300	44	34	35	22	24	31	32	32	36	48	48	36	20	21	35	34	44	44	44	44
8000	38	28	29	16	18	25	26	30	42	42	42	30	14	15	29	28	38	38	38	38
10000	32	22	23	10	12	19	20	24	36	36	36	24	8	9	23	22	32	32	32	32
OVERALL	78	77	77	75	74	73	73	70	70	73	71	69	70	69	68	67	70	70	70	70
XXX< = EXTRAPOLATED OR INTERPOLATED SPL																				

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																		
NOISE SOURCE/SUBJECT:																		
A-7 NOISE SUPPRESSOR																		
AF32A-24																		
(OPERATION:)																		
(IDLE POWER (54.4% RPM))																		
(SINGLE ENGINE)																		
(GROUND RUNUP (SUPPRESSED))																		
()																		
METEOROLOGY:																		
TEMP = 59 F																		
BAR PRESS = 29.92 IN HG																		
REL HUMID = 70 %																		
DELTA N = 0.8 DB																		
IDENTIFICATIONS:																		
OMEGA 6.2																		
TEST 78-833-801																		
RUN 01																		
AIRCRAFT CODE 833																		
OPERATION CODE 88113																		
PROFILE VERSION A																		
28 NOV 79																		
PAGE 01																		
ANGLE (DEGREES)																		
DISTANCE (FEET)																		
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.4	78.8	75.7	73.4	71.0	68.5	66.1	63.6	61.2	58.7	56.3	53.9	51.5	49.1	46.7	44.3	41.9	39.5
250	80.2	75.7	72.6	69.5	66.4	63.3	60.2	57.1	54.0	50.9	47.8	44.7	41.6	38.5	35.4	32.3	29.2	26.1
315	77.9	73.4	70.3	67.2	64.1	61.0	57.9	54.8	51.7	48.6	45.5	42.4	39.3	36.2	33.1	30.0	26.9	23.8
400	75.6	71.1	68.0	64.9	61.8	58.7	55.6	52.5	49.4	46.3	43.2	40.1	37.0	33.9	30.8	27.7	24.6	21.5
500	73.2	68.7	65.6	62.5	59.4	56.3	53.2	50.1	47.0	43.9	40.8	37.7	34.6	31.5	28.4	25.3	22.2	19.1
630	70.8	66.2	63.1	60.0	56.9	53.8	50.7	47.6	44.5	41.4	38.3	35.2	32.1	29.0	25.9	22.8	19.7	16.6
800	68.2	63.6	60.5	57.4	54.3	51.2	48.1	45.0	41.9	38.8	35.7	32.6	29.5	26.4	23.3	20.2	17.1	14.0
1000	65.4	60.7	57.6	54.5	51.4	48.3	45.2	42.1	39.0	35.9	32.8	29.7	26.6	23.5	20.4	17.3	14.2	11.1
1250	62.4	57.6	54.5	51.4	48.3	45.2	42.1	39.0	35.9	32.8	29.7	26.6	23.5	20.4	17.3	14.2	11.1	8.0
1600	59.2	54.2	51.1	48.0	44.9	41.8	38.7	35.6	32.5	29.4	26.3	23.2	20.1	17.0	13.9	10.8	7.7	4.6
2000	55.6	50.4	47.3	44.2	41.1	38.0	34.9	31.8	28.7	25.6	22.5	19.4	16.3	13.2	10.1	7.0	3.9	0.8
2500	51.5	46.3	43.2	40.1	37.0	33.9	30.8	27.7	24.6	21.5	18.4	15.3	12.2	9.1	6.0	2.9	-0.2	-3.3
3150	46.8	40.2	37.1	34.0	30.9	27.8	24.7	21.6	18.5	15.4	12.3	9.2	6.1	3.0	-0.1	-3.2	-6.3	-9.4
4000	41.0	34.5	31.4	28.3	25.2	22.1	19.0	15.9	12.8	9.7	6.6	3.5	0.4	-2.7	-5.8	-8.9	-12.0	-15.1
5000	35.3	28.8	25.7	22.6	19.5	16.4	13.3	10.2	7.1	4.0	0.9	-2.2	-5.3	-8.4	-11.5	-14.6	-17.7	-20.8
6300	28.5	17.0	12.9	9.8	6.7	3.6	0.5	-2.6	-5.7	-8.8	-11.9	-15.0	-18.1	-21.2	-24.3	-27.4	-30.5	-33.6
8000	20.4	7.6	10.2	1.6	-1.6	-4.7	-7.8	-10.9	-14.0	-17.1	-20.2	-23.3	-26.4	-29.5	-32.6	-35.7	-38.8	-41.9
10000	8.9	1.0																
12500																		
16000																		
20000																		
25000																		

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-24																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 78-033-001																			
AIRCRAFT CODE 833																			
OPERATION CODE 00113																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE F1																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	70.3	65.1	65.9	61.7	63.2	62.4	64.3	62.9	63.5	78.9	69.6	63.2	62.6	68.3	61.8	61.8	67.3	67.3	67.3
250	68.2	63.0	63.8	59.7	61.1	60.2	62.2	60.8	61.4	68.7	67.5	61.1	60.5	58.2	59.7	59.7	65.1	65.1	65.1
315	66.1	60.9	61.7	57.6	59.0	58.1	60.1	58.7	59.2	66.6	65.4	58.9	58.4	56.1	57.5	57.5	63.8	63.8	63.8
400	63.9	58.8	59.5	55.5	56.8	56.0	57.9	56.5	57.1	64.4	63.2	56.8	56.3	53.9	55.4	55.4	60.8	60.8	60.8
500	61.7	56.6	57.3	53.3	54.6	53.7	55.7	54.3	54.8	62.2	61.0	54.5	54.1	51.8	53.2	53.2	58.6	58.6	58.6
630	59.5	54.3	55.1	51.1	52.3	51.5	53.4	52.0	52.6	59.9	58.7	52.3	51.9	49.5	50.9	51.0	56.4	56.4	56.4
800	57.2	52.0	52.8	48.8	50.0	49.1	51.0	49.7	50.2	57.6	56.4	49.9	49.6	47.2	48.5	48.6	54.0	54.0	54.0
1000	54.8	49.6	50.4	46.4	47.6	46.7	48.6	47.2	47.7	55.2	54.0	47.5	47.2	44.8	46.1	46.3	51.6	51.6	51.6
1250	52.3	47.1	47.9	43.9	45.0	44.2	46.0	44.7	45.2	52.7	51.5	45.0	44.8	42.3	43.6	43.8	49.1	49.1	49.1
1600	49.6	44.4	45.2	41.1	42.3	41.5	43.3	42.0	42.5	50.0	48.9	42.4	42.2	39.7	41.0	41.2	46.5	46.5	46.5
2000	46.9	41.6	42.5	38.3	39.5	38.7	40.5	39.3	39.7	47.3	46.1	39.6	39.5	36.9	38.2	38.4	43.8	43.8	43.8
2500	43.9	38.6	39.5	35.2	36.4	35.6	37.4	36.3	36.7	44.3	43.2	36.7	36.7	34.0	35.2	35.5	40.8	40.8	40.8
3150	40.6	35.3	36.1	31.9	33.1	32.4	34.1	33.0	33.4	41.1	40.0	33.5	33.6	30.8	32.0	32.4	37.6	37.6	37.6
4000	37.1	31.7	32.5	28.3	29.4	28.6	30.4	29.3	29.8	37.5	36.4	30.0	30.2	27.2	28.5	28.9	34.8	34.8	34.8
5000	33.1	27.7	28.4	24.4	25.4	24.9	26.3	25.3	25.8	33.6	32.5	26.0	26.4	23.2	24.5	24.9	30.1	30.1	30.1
6300	28.7	23.3	24.0	20.1	20.9	20.6	21.8	20.9	21.3	29.2	28.1	21.7	22.1	18.9	20.2	20.6	25.7	25.7	25.7
8000	24.0	18.9	19.7	16.0	16.6	16.3	17.1	16.6	16.7	24.5	23.6	17.3	17.8	14.7	15.7	16.2	20.9	20.9	20.9
10000	18.8	14.2	15.2	11.6	11.9	11.6	12.2	12.1	11.5	19.2	18.6	12.5	13.0	10.8	10.8	11.4	15.5	15.5	15.5
12500	13.0	9.2	10.4	6.9	7.1	6.7	6.9	7.2	5.9	13.5	13.3	7.3	7.7	5.1	5.4	6.1	9.6	9.6	9.6
16000	7.1	4.2	5.5	2.1	2.1	1.5	1.6	2.1	.1	7.4	7.5	1.7	2.0			.4	3.2	3.2	3.2
20000	1.4		.6							1.2	1.3								
25000																			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
(NOISE SOURCE/SUBJECT:)										(IDENTIFICATION:)									
(A-7 NOISE SUPPRESSOR)										(OMEGA 8.2)									
(AF32A-24)										(TEST 78-833-031)									
()										(RUN 01)									
()										(AIRCRAFT CODE 833)									
()										(OPERATION CODE 80113)									
()										(PROFILE VERSION A)									
()										(28 NOV 79)									
()										(PAGE 61)									
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TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-24																			
OPERATIONS:																			
70% RPM RUNUP																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
PAGE D2																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 78-833-001																			
RUN 02																			
AIRCRAFT CODE 833																			
OPERATION CODE 00109																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE D2																			
ANGLE (DEGREES)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
DISTANCE (FEET)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
200	86.4	87.0	83.8	85.6	82.4	80.9	78.6	76.4	80.6	85.4	80.3	76.8	81.5	84.5	83.8	83.0	81.8	81.8	81.8
250	84.2	84.7	81.6	83.3	79.9	78.4	76.3	74.0	78.3	83.1	78.1	74.4	79.2	82.2	81.6	80.7	79.5	79.5	79.5
315	81.8	82.4	79.2	81.0	77.5	76.1	74.0	71.7	76.0	80.8	75.7	74.0	76.8	79.9	79.2	78.4	77.2	77.2	77.2
400	79.5	80.0	76.9	78.6	75.1	73.6	71.7	69.3	73.6	78.4	73.4	71.6	74.5	77.4	76.8	76.0	74.8	74.8	74.8
500	77.0	77.6	74.4	76.2	72.6	71.1	69.2	66.8	71.1	75.9	70.9	69.1	72.0	75.4	74.4	73.6	72.3	72.3	72.3
630	74.5	75.1	71.9	73.7	70.0	68.4	66.7	64.3	68.6	73.3	68.3	66.6	69.4	72.4	71.8	71.1	69.7	69.7	69.7
800	71.9	72.4	69.2	71.0	67.3	65.6	64.0	61.5	65.8	70.6	65.6	63.7	66.7	69.6	69.0	68.3	66.9	66.9	66.9
1000	69.0	69.6	66.4	68.1	64.5	62.5	61.0	58.5	62.8	67.6	62.7	60.8	63.8	66.7	66.1	65.4	63.9	63.9	63.9
1250	66.0	66.6	63.3	65.0	61.3	59.3	57.7	55.0	59.6	64.4	59.4	57.4	60.6	63.5	62.9	62.2	60.5	60.5	60.5
1600	62.6	63.2	59.7	61.5	57.7	55.6	54.1	51.1	56.0	60.9	55.8	53.6	56.9	59.9	59.4	58.7	56.9	56.9	56.9
2000	58.8	59.4	55.7	57.6	53.6	51.4	49.8	46.5	52.0	57.1	51.7	49.2	52.9	56.0	55.5	54.8	52.9	52.9	52.9
2500	54.5	55.1	51.2	53.3	48.6	46.3	44.8	41.4	47.2	52.7	46.6	43.8	48.0	51.4	51.0	50.4	48.2	48.2	48.2
3150	49.4	50.2	45.6	48.0	42.8	39.7	38.0	33.7	40.8	47.0	40.0	37.0	41.9	45.5	45.6	44.6	41.6	41.6	41.6
4000	42.7	43.8	38.4	41.2	35.0	32.4	31.1	25.2	34.5	40.8	33.6	29.4	34.4	39.2	39.4	37.9	34.8	34.8	34.8
5000	35.5	36.1	30.5	34.0	25.7	23.0	22.6	11.2	25.7	33.8	24.6	15.8	26.0	32.1	32.2	30.3	26.1	26.1	26.1
6300	25.9	27.7	18.5	23.0	13.3	13.6	10.0		11.9	23.4	15.7	2.3	11.7	19.9	20.5	17.6	10.1	10.1	10.1
8000	10.2	11.8	6.6	13.7	.9	4.2				7.7	6.8			7.8	8.7	4.8			
10000																			
12500																			
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT:																
A-7 NOISE SUPPRESSOR																
AF32A-24																
IDENTIFICATIONS:																
OMEGA 8.2																
TEST 78-833-001																
RUN 02																
AIRCRAFT CODE 833																
OPERATION CODE 80109																
PROFILE VERSION A																
28 NOV 79																
PAGE E2																
METEROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 0.0 DB																
ANGLE (DEGREES)																
DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
(FEET)																
200	88.4	89.8	85.7	87.8	83.8	82.0	79.8	76.4	82.1	86.9	81.7	88.6	83.6	86.2	86.0	85.0
250	86.1	87.5	83.4	85.5	81.3	79.6	77.6	74.0	79.8	84.6	79.5	86.2	81.3	83.9	83.7	82.7
315	83.8	85.2	81.1	83.2	78.8	77.2	75.3	71.7	77.5	82.3	77.1	83.8	79.0	81.5	81.4	80.4
400	81.4	82.9	78.8	80.8	76.4	74.8	72.9	69.3	75.1	79.9	74.8	81.5	76.6	79.2	79.0	78.0
500	79.0	80.4	76.3	78.4	74.0	72.2	70.5	66.8	72.6	77.4	72.3	78.9	74.1	76.7	76.5	75.6
630	76.5	77.9	73.8	75.8	71.4	69.6	67.9	64.3	70.1	74.8	69.7	76.3	71.6	74.1	74.0	73.0
800	73.8	75.3	71.1	73.2	68.7	66.7	65.3	61.5	67.3	72.1	67.0	73.5	68.8	71.3	71.2	70.3
1000	71.0	72.5	68.3	70.3	65.8	63.7	62.3	58.5	64.3	69.2	64.1	70.6	65.9	68.4	68.3	67.4
1250	68.0	69.4	65.1	67.2	62.7	60.4	58.9	55.0	61.1	65.9	60.8	67.2	62.5	65.2	65.1	64.2
1600	64.6	66.0	61.5	63.7	59.0	56.8	55.3	51.1	57.5	62.4	57.2	63.6	58.9	61.7	61.6	60.7
2000	60.7	62.2	57.6	59.8	54.9	52.6	51.1	46.5	53.5	58.6	53.1	59.5	54.8	57.7	57.6	56.7
2500	56.4	57.9	53.1	55.5	49.9	47.5	46.0	41.4	48.7	54.2	48.0	54.6	50.1	53.1	53.2	52.3
3150	51.4	53.0	47.5	50.2	44.2	40.9	39.3	33.7	42.3	48.6	41.4	48.0	44.0	47.2	47.8	46.5
4000	44.3	46.1	39.9	42.9	36.1	33.3	32.1	25.2	35.7	42.0	34.7	40.6	36.1	40.6	41.1	39.4
5000	36.7	37.8	31.7	35.3	26.5	23.7	21.3	11.2	26.5	34.7	25.5	30.9	27.2	33.1	33.5	31.5
6300	26.7	28.8	19.3	24.7	13.8	14.1	10.5		12.5	24.0	16.3	3.0	12.6	20.6	21.3	18.3
8000	10.6	12.4	6.9	14.1	1.1	4.4				8.0	7.1		8.2		9.2	5.2
10000																
12500																
16000																
20000																
25000																

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-24																			
OPERATION:																			
70% RPM RUNUP																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
DELTA N = 0.0 DB																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
28 NOV 79																			
PAGE F2																			
AIRCRAFT CODE 833																			
OPERATION CODE 00109																			
PROFILE VERSION A																			
IDENTIFICATION:																			
OMEGA 6-2																			
TEST 78-833-001																			
RUN 02																			
DISTANCE (FEET)																			
ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	71.3	71.5	68.6	70.5	66.9	65.5	64.2	61.9	66.1	71.1	65.5	63.4	66.2	69.8	69.0	68.1	66.5	66.5	66.5
250	69.1	69.4	66.5	68.4	64.8	63.3	62.1	59.8	63.9	68.9	63.3	61.3	64.0	67.6	66.8	65.9	64.4	64.4	64.4
315	67.0	67.2	64.3	66.2	62.6	61.1	59.9	57.7	61.7	66.7	61.2	59.1	61.9	65.3	64.6	63.7	62.1	62.1	62.1
400	64.7	65.0	62.1	64.0	60.5	58.9	57.7	55.5	59.5	64.4	59.0	56.9	59.7	63.0	62.4	61.5	59.9	59.9	59.9
500	62.5	62.7	59.9	61.7	58.2	56.7	55.5	53.3	57.2	62.0	56.7	54.7	57.4	60.7	60.0	59.2	57.5	57.5	57.5
630	60.1	60.3	57.5	59.3	55.9	54.3	53.1	51.0	54.8	59.6	54.4	52.4	55.1	58.2	57.6	56.8	55.1	55.1	55.1
800	57.7	57.9	55.0	56.8	53.5	51.9	50.7	48.6	52.4	57.1	52.0	50.0	52.7	55.7	55.1	54.3	52.6	52.6	52.6
1000	55.2	55.4	52.5	54.2	51.0	49.4	48.2	46.2	49.8	54.4	49.5	47.4	50.1	53.0	52.5	51.7	50.0	50.0	50.0
1250	52.5	52.7	49.8	51.5	48.3	46.7	45.5	43.5	47.2	51.6	46.9	44.7	47.4	50.2	49.8	49.0	47.2	47.2	47.2
1600	49.7	49.8	46.9	48.6	45.5	44.0	42.7	40.7	44.4	48.7	44.1	41.8	44.5	47.3	46.9	46.1	44.3	44.3	44.3
2000	46.7	46.8	43.8	45.4	42.4	41.0	39.7	37.7	41.4	45.6	41.2	38.7	41.4	44.1	43.8	43.0	41.2	41.2	41.2
2500	43.4	43.4	40.5	42.1	39.1	37.7	36.5	34.5	38.2	42.2	38.0	35.3	38.0	40.8	40.5	39.7	37.9	37.9	37.9
3150	39.9	39.8	36.9	38.5	35.5	34.2	33.0	31.0	34.7	38.6	34.5	31.6	34.4	37.1	36.9	36.1	34.2	34.2	34.2
4000	36.0	35.8	33.0	34.5	31.7	30.3	29.2	27.2	31.0	34.7	30.7	27.6	30.3	33.2	32.9	32.2	30.3	30.3	30.3
5000	31.7	31.4	28.7	30.2	27.4	26.1	25.0	23.0	26.8	30.4	26.6	23.3	26.0	28.8	28.5	27.8	26.0	26.0	26.0
6300	27.1	26.6	24.1	25.5	22.9	21.6	20.5	18.5	22.3	25.7	22.1	18.7	21.3	24.1	23.8	23.1	21.4	21.4	21.4
8000	22.8	22.1	19.9	21.0	18.8	17.5	16.3	14.5	17.8	20.8	17.9	14.6	17.0	19.4	19.1	18.6	17.0	17.0	17.0
10000	18.3	17.6	15.5	16.3	14.5	13.3	11.9	10.4	13.1	15.6	13.5	10.5	12.6	14.5	14.3	13.9	12.4	12.4	12.4
12500	13.8	13.1	11.1	11.6	10.3	9.1	7.3	6.1	8.2	10.3	8.9	6.4	8.4	9.6	9.4	9.1	7.8	7.8	7.8
16000	9.3	8.8	6.8	7.0	6.3	4.9	2.8	2.0	3.2	4.9	4.3	2.5	4.5	4.8	4.5	4.4	3.3	3.3	3.3
20000	5.1	4.8	2.7	2.6	2.7	1.1							1.1						
25000	1.4	1.3																	

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																		
NOISE SOURCE/SUBJECT:																		
(OPERATION:																		
(70X RPM RUNUP																		
(SINGLE ENGINE																		
(GROUND RUNUP (SUPPRESSED)																		
(
METEOROLOGY:																		
TEMP = 59 F																		
BAR PRESS = 29.92 IN HG																		
REL HUMID = 70 %																		
DELTA N = 0.0 DB																		
AIRCRAFT CODE 033																		
OPERATION CODE 00109																		
PROFILE VERSION A																		
20 NOV 79																		
PAGE 62																		
IDENTIFICATION:																		
OMEGA 0.2																		
TEST 78-033-001																		
RUN 02																		
DISTANCE																		
(FEET,																		
ANGLE (DEGREES)																		
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																		
200	73.2	74.3	70.5	72.7	68.3	66.6	65.4	61.9	67.5	72.6	66.9	65.2	60.3	71.5	71.2	70.1	60.5	68.5
250	71.1	72.2	68.4	70.5	66.1	64.5	63.3	59.8	65.4	70.4	64.7	63.1	66.1	69.3	69.0	67.9	66.3	66.3
315	68.9	70.0	66.2	68.4	64.0	62.3	61.2	57.7	63.2	68.2	62.6	60.9	64.0	67.1	66.8	65.7	64.1	64.1
400	66.7	67.8	64.0	66.1	61.8	60.1	59.0	55.5	61.0	65.9	60.4	58.7	61.8	64.8	64.5	63.5	61.8	61.8
500	64.4	65.5	61.7	63.8	59.6	57.8	56.7	53.3	58.7	63.5	58.1	56.5	59.5	62.4	62.2	61.1	59.5	59.5
630	62.1	63.2	59.4	61.5	57.2	55.5	54.4	51.0	56.3	61.1	55.8	54.2	57.2	59.9	59.8	58.8	57.0	57.0
800	59.6	60.7	56.9	59.0	54.8	53.0	51.9	48.6	53.9	58.6	53.4	51.8	54.8	57.4	57.3	56.3	54.5	54.5
1000	57.1	58.2	54.4	56.4	52.3	50.5	49.4	46.2	51.3	55.9	50.9	49.2	52.2	54.7	54.7	53.7	51.9	51.9
1250	54.5	55.5	51.7	53.6	49.7	47.9	46.8	43.5	48.6	53.2	48.3	46.5	49.5	51.9	52.0	51.0	49.2	49.2
1600	51.7	52.7	48.0	50.7	46.9	45.1	43.9	40.7	45.8	50.2	45.5	43.6	46.6	49.8	49.1	48.1	46.2	46.2
2000	48.6	49.6	45.7	47.6	43.8	42.1	41.0	37.7	42.9	47.1	42.6	40.4	43.5	45.9	46.0	45.0	43.1	43.1
2500	45.4	46.3	42.4	44.3	40.5	38.9	37.7	34.5	39.7	43.8	39.4	37.1	40.1	42.5	42.7	41.7	39.8	39.8
3150	41.8	42.7	38.8	40.6	36.9	35.4	34.2	31.0	36.2	40.2	35.9	33.4	36.5	38.9	39.1	38.1	36.2	36.2
4000	37.6	38.1	34.5	36.3	32.7	31.3	30.1	27.2	32.2	35.9	31.9	29.0	32.0	34.6	34.7	33.8	31.9	31.9
5000	32.9	33.1	29.8	31.5	28.3	26.8	25.7	23.0	27.7	31.3	27.4	24.4	27.3	29.8	29.8	28.0	27.2	27.2
6300	27.9	27.7	24.9	26.4	23.5	22.0	21.0	18.5	22.9	26.3	22.6	19.5	22.2	24.7	24.6	23.9	22.1	22.1
8000	23.2	22.7	20.3	21.4	19.1	17.7	16.5	14.5	18.1	21.1	18.2	15.0	17.4	19.7	19.5	19.0	17.4	17.4
10000	18.3	17.6	15.5	16.3	14.5	13.3	11.9	10.4	13.1	15.6	13.5	10.5	12.6	14.5	14.3	13.9	12.4	12.4
12500	13.0	13.1	11.1	11.6	10.3	9.1	7.3	6.1	8.2	10.3	8.9	6.4	8.4	9.6	9.4	9.1	7.8	7.8
16000	9.3	8.8	6.8	7.0	6.3	4.9	2.8	2.0	3.2	4.9	4.3	2.5	4.5	4.8	4.5	4.4	3.3	3.3
20000	5.1	4.8	2.7	2.8	2.7	1.1							1.1	.4				
25000	1.4	1.3																

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

A-7 NOISE SUPPRESSOR

AF32A-24

OPERATION:

78% RPM RUNUP

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 78 %

DELTA N = 9.8 DB

IDENTIFICATION:

OMEGA 6.2

TEST 78-833-001

RUN 02

AIRCRAFT CODE 833

OPERATION CODE 00109

PROFILE VERSION A

28 NOV 79

PAGE J2

	P=PNLT											A=AL											T=ALT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	-10	0	10	20	30	40	50	60	70	80	90	-10	0	10	20	30	40	50	60	70	80	90	-10	0	10	20	30	40	50	60	70	80	90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
ANGLE	NOISE LEVEL IN PNDB OR DBA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
0

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																
1/3 OCTAVE BAND																
DISTANCE = 250 FEET																
NOISE SOURCE/SUBJECT:																
A-7 NOISE SUPPRESSOR																
AF32A-24																
OPERATION:																
85.6% RPM RUNUP																
SINGLE ENGINE																
GROUND RUNUP (SUPPRESSED)																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 0.0 DB																
IDENTIFICATION:																
OMEGA 8.2																
TEST 78-833-001																
AIRCRAFT CODE 833																
OPERATION CODE 00118																
PROFILE VERSION A																
28 NOV 79																
PAGE C3																
BAND CENTER																
FREQ (HZ)																
50	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
63	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81
80	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
100	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
125	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
160	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
200	83	83	84	84	85	86	87	88	89	90	91	92	93	94	95	96
250	81	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52
315	76	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70
400	77	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
500	75	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
630	73	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
800	72	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
1000	72	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
1250	71	70	71	71	71	71	71	71	71	71	71	71	71	71	71	71
1600	72	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
2000	70	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
2500	68	66	67	67	67	67	67	67	67	67	67	67	67	67	67	67
3150	65	64	66	66	66	66	66	66	66	66	66	66	66	66	66	66
4000	64	63	64	64	64	64	64	64	64	64	64	64	64	64	64	64
5000	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60
6300	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
8000	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55
10000	48<	48<	49	49	49	49	49	49	49	49	49	49	49	49	49	49
OVERALL	91	91	92	93	93	93	93	93	93	93	93	93	93	93	93	93

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
A-7 NOISE SUPPRESSOR																			
AF32A-24																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 78-833-001																			
RUN 83																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.8 DB																			
PAGE F3																			
AIRCRAFT CODE 833																			
OPERATION CODE 00118																			
PROFILE VERSION A																			
28 NOV 79																			
DISTANCE																			
(FEET)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	85.0	83.4	84.8	83.7	82.1	82.5	83.2	80.0	76.9	81.8	81.5	79.5	79.4	79.3	80.1	80.6	80.1	80.1	80.1
250	82.9	81.3	81.9	81.6	80.0	80.4	81.1	77.9	74.6	79.8	79.4	77.4	77.3	77.2	78.0	78.5	78.1	78.1	78.1
315	80.8	79.2	79.8	79.5	77.9	78.3	79.0	75.7	72.6	77.7	77.4	75.3	75.2	75.1	75.9	76.4	76.0	76.0	76.0
400	78.7	77.1	77.7	77.4	75.7	76.1	76.8	73.5	70.4	75.5	75.2	73.2	73.1	73.0	73.7	74.3	73.8	73.8	73.8
500	76.4	74.8	75.4	75.1	73.5	73.9	74.6	71.3	68.1	73.3	73.0	71.0	70.9	70.8	71.5	72.0	71.5	71.5	71.5
630	74.1	72.4	73.8	72.7	71.2	71.5	72.3	69.0	65.8	71.1	70.8	68.7	68.6	68.5	69.2	69.8	69.2	69.2	69.2
800	71.7	70.0	70.6	70.3	68.8	69.1	69.9	66.6	63.3	68.7	68.4	66.3	66.2	66.2	66.8	67.4	66.8	66.8	66.8
1000	69.3	67.4	68.0	67.7	66.2	66.6	67.4	64.2	60.8	66.3	66.0	63.9	63.8	63.8	64.4	65.0	64.3	64.3	64.3
1250	66.7	64.7	65.3	65.0	63.6	64.0	64.9	61.7	58.2	63.7	63.5	61.3	61.3	61.3	61.8	62.4	61.6	61.6	61.6
1600	63.9	61.9	62.4	62.2	60.9	61.3	62.2	59.0	55.4	61.1	60.9	58.6	58.7	58.7	59.2	59.8	58.9	58.9	58.9
2000	61.1	59.9	59.4	59.2	58.0	58.4	59.4	56.3	52.5	58.4	58.2	55.9	55.9	55.9	56.4	57.0	56.0	56.0	56.0
2500	58.0	55.7	56.2	56.0	54.8	55.3	56.3	53.3	49.4	55.3	55.0	52.7	53.0	53.1	53.4	54.0	52.8	52.8	52.8
3150	54.5	52.3	52.8	52.5	51.3	51.9	53.0	50.0	46.0	51.8	51.5	49.3	49.7	49.9	50.2	50.8	49.4	49.4	49.4
4000	50.8	48.6	49.1	48.7	47.6	48.2	49.3	46.3	42.3	48.1	47.6	45.5	46.1	46.3	46.5	47.2	45.6	45.6	45.6
5000	46.6	44.5	45.0	44.7	43.4	44.1	45.2	42.2	38.2	43.9	43.3	41.3	42.0	42.2	42.5	43.2	41.5	41.5	41.5
6300	42.2	40.2	40.7	40.3	39.0	39.8	40.7	37.8	33.9	39.4	38.8	36.8	37.7	37.9	38.2	38.9	37.1	37.1	37.1
8000	38.2	36.8	36.5	36.3	35.0	35.7	36.6	33.8	29.8	35.6	35.2	33.0	33.7	34.0	34.2	34.8	33.1	33.1	33.1
10000	34.0	31.6	32.1	32.0	30.7	31.4	32.3	29.6	25.4	31.5	31.3	28.9	29.4	29.8	30.0	30.5	28.8	28.8	28.8
12500	29.5	26.9	27.5	27.5	26.1	26.7	27.6	25.1	20.7	27.1	27.1	24.6	24.8	25.3	25.4	25.7	24.2	24.2	24.2
16000	24.8	22.1	22.7	22.8	21.4	21.8	22.6	20.2	15.7	22.4	22.6	20.0	19.8	20.4	20.5	20.7	19.5	19.5	19.5
20000	19.8	17.2	18.0	18.2	16.5	16.7	17.3	14.8	10.6	17.4	17.8	15.1	14.5	15.1	15.3	15.3	14.6	14.6	14.6
25000	14.6	12.4	13.5	13.7	11.8	11.5	11.7	9.1	5.5	12.1	12.6	10.0	9.1	9.5	9.8	9.8	9.7	9.7	9.7

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (IDENTIFICATION:
 (OMEGA 8.2
 (TEST 78-833-001
 (RUN 03
 (AIRCRAFT CODE 833
 (NOISE SOURCE/SUBJECT:
 (A-7 NOISE SUPPRESSOR
 (AF32A-24
 (OPERATION:
 (85.6% RPM RUNUP
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 59 F
 (BAR PRESS = 29.92 IN HG
 (REL HUMID = 70 %
 (DELTA N = 0.0 DB
 (PAGE J3
 (

	P=PNLT											A=AL	T=ALT
	0	10	20	30	40	50	60	70	80	90	100		
ANGLE													
IN													
DEGREES													
0													
10													
20													
30													
40													
50													
60													
70													
80													
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100													
110													
120													
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TABLE: PERCEIVED NOISE LEVEL (PNDB)																			IDENTIFICATIONS:	
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			OMEGA 8.2	
NOISE SOURCE/SUBJECT:																			TEST 78-833-001	
A-7 NOISE SUPPRESSOR																			RUN 04	
AF32A-24																			AIRCRAFT CODE 833	
(OPERATION:																			OPERATION CODE 00104	
(MILITARY POWER (97.7)																			PROFILE VERSION A	
(SINGLE ENGINE																			28 NOV 79	
(GROUND RUNUP (SUPPRESSED)																			PAGE 04	
(DELTA N = 8.0 DB																				
ANGLE (DEGREES)																				
DISTANCE																				
(FEET)																				
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	108.6	106.7	106.7	105.2	104.9	105.7	104.9	105.3	103.9	106.3	105.8	103.6	102.3	102.3	102.0	101.5	101.6	101.6	101.6	
250	106.4	104.5	104.6	103.0	102.7	103.5	102.7	103.1	101.8	104.2	103.7	101.5	100.1	99.8	99.8	99.3	99.4	99.4	99.4	
315	104.3	102.3	102.3	100.8	100.5	101.3	100.5	100.9	99.6	102.0	101.5	99.2	97.9	97.6	97.6	97.1	97.2	97.2	97.2	
400	102.0	100.0	100.0	98.5	98.2	99.0	98.2	98.6	97.3	99.7	99.3	97.0	95.6	95.3	95.3	94.9	95.0	95.0	95.0	
500	99.8	97.7	97.7	96.1	95.8	96.6	95.8	96.3	94.9	97.4	97.0	94.6	93.2	92.9	92.9	92.6	92.7	92.7	92.7	
630	97.4	95.2	95.2	93.7	93.4	94.1	93.4	93.8	92.4	95.1	94.6	92.1	90.7	90.5	90.5	90.2	90.1	90.1	90.1	
800	95.0	92.7	92.6	91.1	90.8	91.6	90.8	91.2	89.8	92.6	92.2	89.5	88.1	87.9	87.9	87.7	87.4	87.4	87.4	
1000	92.4	90.0	89.8	88.3	88.0	88.8	88.1	88.5	87.1	90.0	89.6	86.8	85.4	85.2	85.2	85.1	84.6	84.6	84.6	
1250	89.7	87.1	86.9	85.4	85.1	85.9	85.2	85.6	84.2	87.3	86.9	83.9	82.5	82.3	82.3	82.4	81.9	81.9	81.9	
1600	86.9	84.0	83.7	82.3	82.0	82.8	82.2	82.6	81.1	84.4	84.0	80.8	79.6	79.2	79.2	79.5	78.9	78.9	78.9	
2000	83.9	80.6	80.4	78.9	78.6	79.5	78.8	79.4	77.8	81.3	81.0	77.4	76.4	75.9	75.9	76.5	75.8	75.8	75.8	
2500	80.1	77.0	76.7	75.4	74.9	75.8	75.2	76.1	74.1	77.7	77.2	73.7	73.0	72.2	72.2	73.1	72.4	72.4	72.4	
3150	75.9	72.9	72.5	71.5	70.8	71.7	71.1	72.1	70.0	73.7	73.1	69.6	69.1	68.1	68.1	69.1	68.4	68.4	68.4	
4000	71.5	68.4	68.1	67.4	66.3	67.3	66.7	67.7	65.5	69.3	68.7	65.0	64.8	63.5	63.5	64.7	63.9	63.9	63.9	
5000	66.7	63.7	63.2	62.7	61.6	62.6	61.9	62.8	60.4	64.5	63.8	60.0	59.9	58.5	58.5	59.7	58.9	58.9	58.9	
6300	61.7	58.7	58.0	57.6	56.4	57.5	56.9	57.8	55.0	59.4	58.8	54.9	54.8	53.4	53.4	54.7	53.9	53.9	53.9	
8000	57.7	54.2	53.6	53.2	51.9	52.9	52.4	53.4	50.2	55.3	54.7	50.2	50.3	48.3	48.3	50.5	49.5	49.5	49.5	
10000	53.4	49.1	49.0	48.0	46.6	47.8	47.0	48.7	44.2	50.8	50.1	44.7	44.8	43.1	43.1	45.7	44.6	44.6	44.6	
12500	48.5	43.2	43.4	42.2	40.9	42.0	41.0	43.1	38.4	45.6	45.0	39.0	39.0	37.4	37.4	40.1	38.9	38.9	38.9	
16000	42.7	36.8	37.3	36.1	34.4	35.4	34.4	36.8	31.6	39.5	38.7	31.8	32.2	30.8	30.8	33.9	32.2	32.2	32.2	
20000	35.9	29.5	29.3	28.6	25.6	26.8	25.1	28.6	21.1	32.3	31.5	22.7	23.7	20.6	20.6	25.9	23.1	23.1	23.1	
25000	27.8	16.2	16.0	15.3	12.4	13.6	11.7	18.6	6.9	23.1	22.7	7.6	9.9	6.9	6.9	12.9	9.9	9.9	9.9	

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)																					
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																					
NOISE SOURCE/SUBJECT:										METEOROLOGY:										IDENTIFICATION:	
(A-7 NOISE SUPPRESSOR										(TEMP = 59 F) OMEGA 8.2	
(AF32A-24										(BAR PRESS =29.92 IN HG) TEST 76-833-001	
(SINGLE ENGINE										(REL HUMID = 70 %) RUN 04	
(GROUND RUNUP (SUPPRESSED)										(DELTA N = 4.0 DB) AIRCRAFT CODE 833	
(() PROFILE VERSION A	
(() 28 NOV 79	
(() PAGE E4	
(()	
DISTANCE																					
ANGLE (DEGREES)																					
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		
200	109.1	107.4	107.6	106.0	105.4	106.4	105.4	105.3	103.9	106.3	105.8	103.6	102.3	102.5	102.5	101.5	101.6	101.6	101.6		
250	107.0	105.2	105.4	103.8	103.2	104.2	103.3	103.1	101.8	104.2	103.7	101.5	100.1	100.4	100.4	99.3	99.4	99.4	99.4		
315	104.8	103.0	103.1	101.6	101.0	101.9	101.0	100.9	99.6	102.0	101.5	99.2	97.9	98.1	98.1	97.1	97.2	97.2	97.2		
400	102.6	100.7	100.9	99.3	98.7	99.6	98.6	98.6	97.3	99.7	99.3	97.0	95.6	95.6	95.6	94.9	95.0	95.0	95.0		
500	100.3	98.4	98.5	96.9	96.4	97.3	96.4	96.3	94.9	97.4	97.0	94.6	93.2	93.5	93.5	92.6	92.7	92.7	92.7		
630	98.0	95.9	96.0	94.5	93.9	94.8	93.9	93.8	92.4	95.1	94.6	92.1	90.7	91.0	91.0	90.2	90.1	90.1	90.1		
800	95.5	93.4	93.4	91.9	91.3	92.2	91.4	91.2	89.8	92.6	92.2	89.5	88.1	88.4	88.4	87.7	87.4	87.4	87.4		
1000	93.0	90.6	90.6	89.1	88.5	89.5	88.7	88.5	87.1	90.0	89.6	86.8	85.4	85.7	85.7	85.1	84.6	84.6	84.6		
1250	90.3	87.7	87.7	86.2	85.6	86.6	85.8	85.6	84.2	87.3	86.9	83.9	82.5	82.8	82.8	82.4	81.9	81.9	81.9		
1600	87.4	84.6	84.6	83.1	82.5	83.5	82.7	82.6	81.1	84.4	84.0	80.8	79.6	79.7	79.7	79.5	78.9	78.9	78.9		
2000	84.4	81.3	81.2	79.7	79.1	80.2	79.4	79.4	77.8	81.3	81.0	77.4	76.4	76.4	76.4	76.5	75.8	75.8	75.8		
2500	80.7	77.6	77.5	76.2	75.4	76.5	75.7	75.1	73.7	77.7	77.2	73.7	73.0	72.7	72.7	73.1	72.4	72.4	72.4		
3150	76.4	73.5	73.4	72.4	71.3	72.4	71.7	72.1	70.0	73.7	73.1	69.6	69.1	68.6	68.6	69.1	68.4	68.4	68.4		
4000	71.9	68.9	68.7	68.0	66.7	67.9	67.1	67.7	65.5	69.3	68.7	65.0	64.8	63.9	63.9	64.7	63.9	63.9	63.9		
5000	67.0	64.1	63.6	63.2	61.9	63.0	62.3	62.8	60.4	64.5	63.8	60.0	59.9	58.9	58.9	59.7	58.9	58.9	58.9		
6300	61.9	59.0	58.3	58.0	56.6	57.8	57.1	57.8	55.3	59.4	58.8	54.9	54.8	53.6	53.6	54.7	53.9	53.9	53.9		
8000	57.8	54.3	53.8	53.3	52.0	53.1	52.5	53.4	50.2	55.3	54.7	50.2	50.3	48.4	48.4	50.5	49.5	49.5	49.5		
10000	53.4	49.1	49.0	48.0	46.6	47.8	47.8	48.7	44.2	50.8	50.1	44.7	44.8	43.1	43.1	45.7	44.6	44.6	44.6		
12500	48.5	43.2	43.4	42.2	40.9	41.8	40.6	43.1	38.4	45.6	45.0	39.0	39.0	37.4	37.4	40.1	38.9	38.9	38.9		
16000	42.7	36.6	37.3	36.1	34.4	35.4	34.4	36.8	31.6	39.5	38.7	31.8	32.2	30.0	30.0	33.9	32.2	32.2	32.2		
20000	35.9	29.5	29.3	28.6	25.6	26.8	25.1	28.6	21.1	32.3	31.5	22.7	23.7	20.6	20.6	25.9	23.1	23.1	23.1		
25000	27.0	16.2	16.0	15.3	12.4	13.6	11.7	18.6	6.9	23.1	22.7	7.6	9.9	6.9	6.9	12.9	9.9	9.9	9.9		

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)															
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE															
NOISE SOURCE/SUBJECT:															
AF32A-24															
IDENTIFICATIONS:															
TEST 78-833-001															
RUN 04															
METEOROLOGY:															
TEMP = 59 F															
BAR PRESS = 29.92 IN HG															
REL HUMID = 70 %															
DELTA N = 0.0 DB															
PAGE G4															
ANGLE (DEGREES)															
DISTANCE (FEET)															
200															
250															
315															
400															
500															
630															
800															
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1250															
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3150															
4000															
5000															
6300															
8000															
10000															
12500															
15000															
20000															
25000															

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 A-7 NOISE SUPPRESSOR
 AF32A-24
 IDENTIFICATION:
 OMEGA 8.2
 TEST 78-833-001
 RUN 04
 AIRCRAFT CODE 833
 OPERATION CODE 00104
 PROFILE VERSION A
 28 NOV 79
 PAGE J4
 METEOROLOG:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 P=PNLT
 A=AL
 T=ALT

	10	20	30	40	50	60	70	80	90	100	110
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A N G L E
 I N D E G R E E S

[illegible][illegible]

ANCE PRODUCE ON THE GROUND BY

KC-135A NOISE SUPPRESSOR

OURING GROUND RUN-UP OPERATIONS

TEST 77-726-001
AIRCRAFT CODE: 726
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting

Engine Runup, 80% RPM	. . . . .	55-60
Military Power (Dry), 96% RPM	. . . . .	61-66
Military Power (Wet), 96% RPM	. . . . .	67-72

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
 NORMALIZED SPL AT 250 FEET
 NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
 PERCEIVED NOISE LEVEL
 TONE-CORRECTED, PERCEIVED NOISE LEVEL
 A-WEIGHTED OVERALL SOUND LEVEL
 TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
 NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSHIFT-PACIFIC AIR MEDICAL RESERVE LABORATORY

[illegible]

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) AIRCRAFT CODE 726																			
KC-135A NOISE SUPPRESSOR () TEMP = 59 F) OPERATION CODE 01019																			
A/M32-52 (80% RPM) BAR PRESS = 29.92 IN HG) PROFILE VERSION A																			
(INBOARD ENGINE) REL HUMID = 70 %) 28 NOV 79																			
(SUPPRESSED GROUND RUNUP) DELTA N = 0.0 DB) PAGE C1																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	73<	74<	73<	75<	78<	75<	78	77	80	75	75	81<	76	79	79	78<	74<	63<	
63	73	74<	73	75	78<	75	74	73	75	80	77	81	81	80	80	78	74	63<	
80	75	74	77	74	78	76	76	77	82	79	80	79	84	83	80	78	73	63<	
100	76<	75	75	76	78<	77	75	74<	75<	80	76	77	80	82	83	79	76	72<	63<
125	77	79	75<	76	78	76	72<	73<	74<	79	77	79	82	85	87	82	76<	72<	63<
160	74	75	74	73	72	71	70	71	72	79	77	77	80	83	84	80	77	71	63<
200	72	73	72	71	69	71	71	71	73	78	75	77	79	80	80	78	75	74	63<
250	73	74	72	71	72	72	71	72	74	76	74	78	82	84	81	80	76	76	63<
315	75	76	75	74	71	70	69	71	73	75	75	79	85	87	80	79	77	74	63
400	75	74	74	73	70	70	69	71	72	76	75	77	82	88	81	78	77	71	64
500	75	75	75	73	69	70	68	70	74	76	78	75	82	85	81	77	74	69	65
630	78	77	78	76	71	73	70	71	76	78	79	78	81	85	79	76	76	69	65
800	77	77	80	78	71	75	72	72	76	78	77	78	81	84	82	76	75	69	65
1000	77	77	81	78	72	78	73	72	74	76	76	76	83	81	78	75	72	67	62
1250	81	81	84	81	73	78	73	70	73	74	76	74	79	80	77	74	72	67	63
1600	86	87	89	88	80	86	79	76	81	78	78	74	79	80	78	78	76	68	65
2000	89	92	91	96	88	95	85	83	88	84	85	77	85	80	83	84	82	72	70
2500	83	82	88	84	80	85	79	75	77	75	77	73	78	78	77	75	72	65	64
3150	82	81	89	85	79	86	81	78	80	76	77	72	79	78	77	73	70	64	65
4000	89	89	95	92	85	95	91	90	92	86	84	77	83	81	79	75	72	69	71
5000	83	81	89	88	79	87	82	80	80	76	76	74	80	78	77	72	69	63	63
6300	83	80	87	85	78	86	79	78	80	78	82	83	89	89	87	81	77	68	67
8000	81	78	84	83	75	83	78	75	76	72	74	71	77	76	75	69	66	59	58
10000	78	75	81	78	71	80	73	70	72	69	70	67	73	72	72	67	63	57	55
OVERALL	96	96	100	99	93	99	94	92	95	93	92	91	96	97	95	92	90	85	79

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: (OPERATIONS:) METEOROLOGY:) AIRCRAFT CODE 726																			
KC-135A NOISE SUPPRESSOR (80% RPM) BAR PRESS =29.92 IN HG) OPERATION CODE 01019																			
A/M32-52 (INBOARD ENGINE) REL HUMID = 70 %) PROFILE VERSION A																			
(SUPPRESSED GROUND RUNUP) DELTA N = 0.0 DB) 28 NOV 79																			
(DISTANCE (FEET)) ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	112.4	112.4	117.1	115.1	108.6	116.3	111.8	110.2	112.4	109.2	108.5	105.9	111.7	111.5	110.0	106.4	103.7	96.6	94.9
250	110.1	110.1	114.7	112.0	106.3	113.9	109.5	107.9	110.0	106.9	106.2	103.4	109.3	109.2	107.5	104.2	101.5	94.4	92.6
315	107.6	107.6	112.2	110.5	103.9	111.4	107.0	105.4	107.6	104.5	103.6	100.9	106.7	106.7	105.0	101.9	99.2	92.1	90.2
400	105.0	105.3	109.7	108.1	101.5	108.8	104.4	102.8	105.0	101.9	101.2	98.2	104.0	104.0	102.3	99.5	96.8	89.7	87.6
500	102.4	102.8	106.9	105.6	99.0	106.1	101.7	100.1	102.3	99.3	98.6	95.4	101.2	101.2	99.5	97.1	94.4	87.2	84.9
630	99.5	100.2	104.1	103.0	96.4	103.2	98.8	97.2	99.4	96.5	95.7	92.3	98.1	98.2	96.5	94.5	91.8	84.6	82.1
800	96.4	97.5	101.0	100.3	93.7	100.1	95.7	94.1	96.4	93.4	92.6	89.1	94.8	95.0	93.3	91.8	89.1	81.9	79.1
1000	93.4	94.6	97.6	97.4	90.8	96.8	92.3	90.7	93.0	90.2	89.9	85.7	91.7	91.5	89.4	88.9	86.3	79.0	75.8
1250	90.2	91.6	94.0	94.3	87.7	93.7	88.6	87.0	89.4	86.6	86.8	82.6	88.6	88.4	87.3	85.9	83.2	76.0	72.5
1500	86.9	88.3	90.9	91.0	84.4	90.3	84.5	82.9	85.3	83.2	83.4	79.2	85.2	85.3	83.9	82.6	80.0	72.7	69.2
2000	83.3	84.8	87.6	87.4	80.8	86.7	79.9	78.4	81.5	79.6	79.9	75.6	81.6	82.1	80.3	79.1	76.5	69.1	65.5
2500	79.3	80.9	83.6	83.5	76.8	82.7	75.3	73.4	77.5	75.7	75.9	71.6	77.6	78.1	76.4	75.2	72.6	65.1	61.5
3150	75.0	76.6	79.2	79.1	72.4	78.3	70.8	68.9	73.1	71.3	71.6	67.2	73.3	73.8	72.0	70.9	68.2	60.6	56.9
4000	70.1	71.8	74.3	74.3	67.4	73.4	65.7	63.8	68.1	66.3	66.7	62.3	68.4	69.8	67.8	65.9	63.3	55.4	51.7
5000	64.7	66.5	68.8	68.9	61.9	67.9	60.1	58.0	62.6	60.9	61.2	57.2	62.9	64.8	61.6	60.6	57.8	49.6	45.6
6300	58.6	60.3	62.6	62.7	55.5	61.6	53.6	51.6	56.4	54.6	55.2	51.8	56.9	58.9	56.2	54.5	51.8	42.5	38.8
8000	51.9	53.7	56.4	55.9	48.6	54.7	46.4	44.0	49.6	47.9	48.5	46.6	51.7	54.4	51.4	48.1	44.7	36.9	30.9
10000	43.9	45.8	47.1	48.2	39.5	46.6	37.1	34.5	41.0	41.1	42.2	40.9	46.1	49.6	45.9	40.8	38.6	30.6	20.1
12500	36.1	36.1	37.8	37.6	27.6	35.7	26.2	25.6	33.0	34.8	35.7	34.2	40.4	43.6	39.3	34.8	31.8	20.8	10.2
16000	27.0	26.4	29.0	26.1	12.2	20.8	9.9	13.4	22.0	26.3	27.6	27.8	33.3	37.4	32.0	26.7	22.1	7.2	.4
20000	12.8	11.8	15.3	8.1		5.9	1.2	10.5	13.6	16.1	14.5	25.7	30.5	23.5	15.5	11.1			
25000			1.5						.9	4.7	1.9	12.5	21.5	9.4	4.4				

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
KC-135A NOISE SUPPRESSOR																			
A/M32-52																			
(OPERATION:)																			
(80% RPM)																			
(INBOARD ENGINE)																			
(SUPPRESSED GROUND RUNUP)																			
(METEOROLOGY:)																			
(TEMP = 59 F)																			
(BAR PRESS = 29.92 IN HG)																			
(REL HUMID = 70 %)																			
(DELTA N = 0.0 DB)																			
(PAGE E1)																			
) IDENTIFICATIONS:																			
) OMEGA 8.2																			
) TEST 77-726-001																			
) RUN 01																			
) AIRCRAFT CODE 726																			
) OPERATION CODE 01019																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE E1																			
) DISTANCE																			
) ANGLE (DEGREES)																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	114.6	115.1	119.1	118.2	111.3	119.2	114.6	113.2	115.8	112.1	111.2	107.6	113.7	113.5	111.8	108.9	106.3	98.3	97.0
250	112.2	112.7	116.8	116.0	109.0	116.6	112.3	110.8	113.5	109.8	108.8	105.1	111.3	111.1	109.3	106.6	104.1	96.1	94.6
315	109.8	110.3	114.3	113.6	106.6	114.4	109.8	108.4	111.0	107.3	106.4	102.6	108.7	108.6	106.8	104.3	101.8	93.8	92.2
400	107.2	107.9	111.7	111.2	104.2	111.8	107.2	105.8	108.4	104.8	103.9	99.9	106.0	105.9	104.1	102.0	99.4	91.4	89.6
500	104.5	105.5	109.8	108.8	101.7	109.1	104.5	103.1	105.7	102.2	101.2	97.1	103.2	103.1	101.3	99.5	96.9	88.9	87.8
630	101.7	102.9	106.1	106.2	99.1	106.2	101.6	100.2	102.9	99.3	98.4	94.0	100.1	100.1	98.3	96.9	94.4	86.4	84.1
800	98.6	100.2	103.8	103.4	96.4	103.1	98.5	97.1	99.8	96.3	95.4	90.8	96.8	96.9	95.1	94.2	91.7	83.6	81.1
1000	95.5	97.3	99.7	100.5	93.5	99.8	95.1	93.7	96.5	93.1	92.5	87.4	93.7	93.4	92.2	91.4	88.8	80.8	77.8
1250	92.4	94.3	96.0	97.4	90.4	96.6	91.4	90.0	92.8	89.5	89.4	84.3	90.6	90.3	89.1	88.3	85.8	77.7	74.6
1500	89.1	91.0	92.8	94.1	87.1	93.3	87.3	85.9	88.8	86.1	86.1	80.9	87.2	87.2	85.7	85.1	82.6	74.4	71.2
2000	85.5	87.4	89.2	90.5	83.5	89.6	82.7	81.4	84.9	82.5	82.5	77.3	83.6	84.0	82.1	81.6	79.0	70.8	67.6
2500	81.5	83.5	85.3	86.6	79.5	85.6	78.1	76.4	80.9	78.5	78.6	73.3	79.6	80.8	78.2	77.7	75.2	66.8	63.6
3150	77.2	79.3	81.2	82.3	75.1	81.2	73.6	71.8	76.5	74.1	74.2	68.9	75.3	75.7	73.8	73.3	70.8	62.3	59.0
4000	71.9	73.9	75.9	76.8	69.6	75.7	68.8	66.1	70.8	68.6	68.6	63.6	70.0	70.5	68.5	67.9	65.3	56.8	53.3
5000	66.0	68.1	69.8	70.8	63.5	69.6	61.7	59.8	64.6	62.6	62.6	58.2	64.1	65.1	62.7	62.0	59.4	50.7	46.9
6300	59.5	61.4	63.5	64.8	56.6	62.6	54.7	52.8	57.7	55.8	56.2	52.5	57.7	59.6	56.9	55.5	52.8	43.2	38.8
8000	52.3	54.2	56.8	56.6	49.1	55.3	47.0	44.6	50.3	46.5	46.5	42.1	46.9	52.1	54.7	51.7	48.6	37.3	33.3
10000	43.9	45.8	47.1	48.2	39.5	46.6	37.1	34.5	41.0	34.1	34.1	30.2	40.9	46.1	49.6	45.9	40.8	30.6	28.1
12500	36.1	38.1	39.8	40.8	31.6	38.7	28.2	25.6	33.0	26.3	26.3	22.6	33.4	38.6	43.6	39.3	34.8	24.8	20.2
15000	27.0	29.4	31.2	32.2	22.8	29.9	19.9	17.4	24.8	18.1	18.1	14.5	25.7	30.9	35.9	32.0	26.7	17.2	14.4
20000	12.8	14.8	16.3	17.1	12.2	18.9	9.9	8.4	10.5	7.9	7.9	4.7	10.9	12.5	14.5	12.5	11.1	7.2	4.4
25000																			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
(KC-135A NOISE SUPPRESSOR																			
(A/M32-52																			
(OPERATION:																			
(80% RPM																			
(INBOARD ENGINE																			
(SUPPRESSED GROUND RUNUP																			
(METEOROLOGY:																			
(TEMP = 59 F																			
(BAR PRESS = 29.92 IN HG																			
(REL HUMID = 70 %																			
(DELTA N = 0.0 DB																			
(AIRCRAFT CODE 726																			
(OPERATION CODE 01019																			
(PROFILE VERSION A																			
(28 NOV 79																			
(PAGE 61																			
IDENTIFICATION:																			
(OMEGA 0.2																			
(TEST 77-726-001																			
(RUN 81																			
DISTANCE																			
(FEET)																			
ANGLE (DEGREES)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
200	100.5	101.0	104.7	105.4	97.7	105.5	99.7	98.0	101.0	96.6	96.5	92.2	98.4	98.2	96.2	94.1	91.7	83.9	82.1
250	98.2	99.6	102.3	103.2	95.4	103.2	97.3	95.6	98.7	94.3	94.2	89.9	96.0	95.9	93.9	91.9	89.5	81.7	79.8
315	95.0	97.3	99.9	100.8	93.1	100.8	94.9	93.2	96.3	91.9	91.9	87.5	93.6	93.5	91.5	89.6	87.2	79.5	77.5
400	93.4	94.9	97.4	98.4	90.7	98.3	92.3	90.6	93.8	89.5	89.5	85.0	91.0	91.2	89.0	87.3	84.9	77.3	75.1
500	90.9	92.5	94.8	96.0	88.2	95.8	89.7	87.9	91.2	87.0	86.9	82.5	88.4	88.7	86.5	84.9	82.5	74.9	72.6
630	88.3	90.8	92.1	93.4	85.7	93.1	86.9	85.1	88.4	84.4	84.4	79.9	85.7	86.2	83.9	82.4	80.1	72.5	70.1
800	85.6	87.3	89.2	90.7	83.0	90.3	83.9	82.1	85.6	81.7	81.7	77.3	83.0	83.5	81.2	79.9	77.6	70.0	67.4
1000	82.7	84.6	86.2	87.9	80.2	87.4	80.7	78.9	82.5	78.9	78.9	74.6	80.2	81.0	78.5	77.3	75.0	67.5	64.6
1250	79.7	81.7	83.0	84.9	77.2	84.3	77.3	75.5	79.3	75.9	75.9	71.8	77.3	78.4	75.7	74.5	72.3	64.8	61.8
1600	76.6	78.6	79.7	81.8	74.0	81.0	73.7	71.8	75.9	72.8	72.9	69.0	74.3	75.7	72.9	71.6	69.5	62.0	58.8
2000	73.3	75.4	76.1	78.4	70.7	77.4	69.9	68.0	72.3	69.6	69.6	66.1	71.3	73.0	69.9	68.6	66.5	59.0	55.7
2500	69.8	71.9	72.4	74.8	67.1	73.7	65.9	64.0	68.6	66.2	66.5	63.0	68.1	70.0	66.8	65.3	63.3	55.8	52.4
3150	66.0	68.1	68.5	70.9	63.1	69.6	61.6	59.8	64.6	62.6	62.9	59.8	64.6	66.6	63.5	61.7	59.7	52.4	48.9
4000	61.4	63.3	63.8	65.9	58.2	64.6	56.6	54.8	59.7	58.2	58.5	55.9	60.5	62.6	59.4	57.3	55.4	48.2	44.7
5000	56.4	58.1	58.9	60.4	52.9	59.1	51.3	49.6	54.3	53.3	53.6	51.5	55.9	58.1	55.0	52.4	50.5	43.7	40.0
6300	50.9	52.4	53.5	54.4	46.9	53.0	45.5	43.9	48.5	48.0	48.3	46.8	50.9	53.3	50.2	47.1	45.3	38.8	35.0
8000	45.3	46.3	47.8	47.8	40.6	46.4	39.6	38.3	42.7	43.0	43.3	42.3	46.4	49.1	45.7	42.1	40.3	34.3	30.3
10000	39.3	39.8	41.7	40.7	34.0	39.2	33.3	32.5	36.8	37.7	38.1	37.6	41.5	44.5	40.9	36.9	35.2	29.6	25.3
12500	33.5	33.6	35.7	34.0	27.8	32.3	27.4	27.2	31.4	32.0	32.2	32.7	36.7	39.3	36.1	32.0	30.4	24.9	20.4
16000	27.5	27.3	29.3	27.3	21.7	25.4	21.4	21.6	25.7	27.4	27.9	27.4	31.6	34.9	30.9	26.9	25.2	19.9	15.1
20000	21.2	20.9	22.5	20.5	15.6	18.4	15.1	15.6	19.7	21.7	22.1	21.6	26.8	29.5	25.3	21.4	19.6	14.5	9.4
25000	14.5	14.3	15.3	13.5	9.6	11.3	8.6	9.3	13.2	15.5	15.6	15.4	20.0	23.4	19.2	15.6	13.6	8.8	3.1

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (AIRCRAFT CODE 726
 (KC-135A NOISE SUPPRESSOR (80% RPM (TEMP = 59 F (OPERATION CODE 01019
 (A/M32-52 (INBOARD ENGINE (BAR PRESS = 29.92 IN HG (PROFILE VERSION A
 (SUPPRESSED GROUND RUNUP (REL HUMID = 70 % (28 NOV 79
 (DELTA N = 9.0 DB (PAGE J1
 (P=PMLT A=AAL T=ALT
 (

	20	30	40	50	60	70	80	90	100	110	120
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

A M G L E I N D E G R E E S

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)) IDENTIFICATION:																			
1/3 OCTAVE BAND) OMEGA 8.2																			
DISTANCE = 250 FEET) TEST 77-726-001																			
) RUN 82																			
NOISE SOURCE/SUBJECT:) METEOROLOGY:) AIRCRAFT CODE 726																			
(KC-135A NOISE SUPPRESSOR										() TEMP = 59 F) OPERATION CODE 01G31																			
(A/M32-52										() MILITARY POWER (DRY)) PROFILE VERSION A																			
										() 96% RPM, INBOARD ENGINE) 28 NOV 79																			
										() SUPPRESSED GROUND RUNUP) DELTA N = 0.0 DB																			
) PAGE C2																			
BAND CENTER																																							
FREQ (HZ)																				ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180																				
(50	89	84	81	86	83	85	86	87	86	88	88	87	89	87	93	88	79	69<	66<																				
(63	85	82	85	85	82	86	82	83	85	87	88	90	91	89	92	88	82	69<	66<																				
(80	84	83	86	84	85	85	82	82	84	87	88	89	91	92	91	87	83	69<	66<																				
(100	86	87	85	86	84	86	84	84	85	87	88	90	93	94	93	87	83	69<	66<																				
(125	87	87	84	86	86	85	84	82	85	87	88	92	95	96	95	89	82	69<	66<																				
(160	84	85	85	86	85	83	82	82	84	87	89	92	95	96	93	88	80	69	66<																				
(200	82	83	84	84	83	82	82	82	85	86	88	91	92	95	90	86	80	71	66																				
(250	85	85	84	84	86	82	82	81	86	87	89	94	96	95	91	88	80	71	70																				
(315	83	84	83	84	84	80	80	78	82	86	86	96	98	95	91	87	80	73	72																				
(400	80	82	80	79	81	77	78	75	80	86	88	95	96	95	89	86	79	70	70																				
(500	79	80	78	78	78	75	77	73	80	86	90	93	94	92	87	84	77	66	69																				
(630	78	79	77	77	77	74	77	72	80	86	89	92	91	91	85	84	77	67	67																				
(800	78	80	78	78	76	74	78	72	80	85	88	93	89	91	85	83	77	68	67																				
(1000	76	79	78	78	74	74	79	72	78	84	86	92	88	90	84	82	77	69	66																				
(1250	76	76	76	76	72	72	76	70	77	82	84	91	86	89	83	83	76	71	66																				
(1600	76	77	77	78	73	72	75	70	77	83	84	90	86	88	83	82	78	71	65																				
(2000	78	80	81	81	76	77	79	73	78	82	84	90	86	88	83	82	77	68	65																				
(2500	86	88	90	89	85	86	90	82	85	86	83	89	86	89	85	85	78	70	68																				
(3150	84	87	87	88	83	84	88	81	84	86	83	87	84	87	82	84	77	68	67																				
(4000	77	80	81	81	75	76	80	72	76	79	80	84	83	85	79	78	75	64	62																				
(5000	77	81	82	82	76	77	80	74	75	78	77	81	79	81	76	75	71	60	60																				
(6300	75	78	79	79	74	75	80	72	75	77	76	81	78	80	75	74	71	60	58																				
(8000	73	75	77	76	71	72	76	68	69	72	72	77	75	76	72	70	67	56	54																				
(10000	70	72	73	73	67	69	72	65	66	70	70	74	74	75	71	69	67	53	52																				
OVERALL																				97	97	97	97	95	95	96	94	96	99	100	105	105	103	99	93	83	80		

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)										IDENTIFICATION:)									
KC-135A NOISE SUPPRESSOR (MILITARY POWER (DRY)) TEMP = 59 F) AIRCRAFT CODE 726										OMEGA 8.2									
A/M32-52 (96% RPM, INBOARD ENGINE) BAR PRESS = 29.92 IN HG) OPERATION CODE 01031										TEST 77-726-081									
(SUPPRESSED GROUND RUNUP) REL HUMID = 70 %) PROFILE VERSION A										28 NOV 79									
(DISTANCE) DELTA N = 0.0 DB) PAGE E2																			
										ANGLE (DEGREES)									
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	111.9	113.5	114.6	113.6	111.8	110.9	114.1	107.8	110.9	112.1	111.7	116.5	115.4	116.6	112.4	111.1	105.8	95.5	93.3
250	109.7	111.2	112.3	111.3	108.8	108.6	111.8	105.5	108.7	109.8	109.4	114.3	113.2	114.4	110.2	100.9	102.8	93.2	91.1
315	107.4	108.9	110.0	109.0	106.5	106.3	109.5	103.2	106.4	107.5	107.1	112.1	111.1	112.2	108.0	106.7	100.5	90.9	88.8
400	105.0	106.6	107.6	106.7	104.1	103.9	107.1	100.8	104.0	105.2	104.8	109.7	108.8	109.9	105.7	104.3	98.1	86.5	86.4
500	102.6	104.1	105.1	104.2	101.6	101.5	104.6	98.4	101.6	102.7	102.3	107.3	106.5	107.5	103.3	101.9	95.6	86.1	83.9
630	100.0	101.5	102.5	101.5	99.8	99.8	102.0	95.7	99.8	100.2	99.8	104.8	104.1	105.8	100.7	99.3	93.8	83.5	81.3
800	97.2	98.7	99.7	98.6	96.3	96.1	99.2	92.9	96.3	97.5	97.1	102.2	101.7	102.3	96.1	96.6	98.3	88.7	78.6
1000	94.3	95.8	96.8	95.8	93.4	93.1	96.3	90.0	93.4	94.6	94.3	99.4	99.0	99.5	95.3	93.8	87.4	77.9	75.7
1250	91.1	92.6	93.6	92.6	90.2	89.9	93.1	86.8	90.2	91.5	91.2	96.3	96.1	96.5	92.2	90.7	84.2	74.8	72.6
1500	87.7	89.2	90.1	89.1	86.8	86.4	89.6	83.4	86.9	88.2	88.1	93.3	93.2	93.3	88.8	87.3	80.9	71.4	69.2
2000	84.0	85.5	86.4	85.4	83.1	82.7	85.9	79.6	83.2	84.5	84.5	90.1	90.1	90.1	85.2	83.7	77.2	67.7	65.6
2500	79.8	81.3	82.2	81.2	78.9	78.5	81.7	75.4	79.1	80.5	81.5	86.3	86.2	86.2	81.2	79.7	73.1	63.8	61.4
3150	75.2	76.7	77.5	76.5	74.2	73.8	77.0	70.7	74.5	76.1	77.6	82.1	81.9	81.9	76.9	75.2	68.7	59.5	56.9
4000	69.5	71.0	71.8	70.8	68.5	67.9	71.3	64.9	68.9	71.2	73.3	77.7	77.1	77.1	72.3	70.1	63.9	54.7	51.9
5000	63.3	64.8	65.4	64.6	62.1	61.5	65.0	58.4	62.8	65.3	68.4	73.1	72.2	72.2	67.3	64.9	58.7	49.2	46.2
6300	56.1	57.9	58.3	57.5	55.0	54.2	57.9	50.9	56.3	60.9	63.3	68.1	67.1	67.1	62.1	59.6	53.8	42.7	40.2
8000	49.6	51.7	50.8	50.2	48.8	48.4	50.3	43.3	51.3	56.6	59.1	63.7	63.2	62.8	57.9	55.1	47.4	36.5	34.9
10000	43.9	45.5	43.7	43.7	42.9	40.0	42.9	36.9	45.4	51.6	54.3	59.0	58.8	58.3	53.2	50.2	41.5	28.2	28.2
12500	37.4	39.0	37.1	37.4	36.4	32.3	35.2	28.9	38.6	46.0	49.3	54.1	54.2	53.5	48.1	44.5	34.9	17.1	19.2
15000	30.3	31.9	29.4	29.4	29.3	23.0	27.3	19.7	32.0	39.5	43.3	48.6	49.0	47.9	42.1	38.1	27.3	6.0	7.6
20000	20.1	22.8	18.5	18.4	19.4	10.8	15.4	10.5	22.6	32.6	36.2	42.2	42.6	41.6	35.5	30.3	15.9		
25000	9.9	9.9	7.6	7.4	3.6		3.6	1.3	7.6	21.9	26.0	33.8	35.8	34.6	26.1	19.8	4.5		

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 KC-135A NOISE SUPPRESSOR
 A/M32-52
 IDENTIFICATION:
 OMEGA 8.2
 TEST 77-726-881
 RUN 02
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 28 NOV 79
 AIRCRAFT CODE 726
 OPERATION CODE 01031
 PROFILE VERSION A
 PAGE J2

	NOISE LEVEL IN PNDB OR OBA										
	20	30	40	50	60	70	80	90	100	110	120
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

A N G L E I N D E G R E E S

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) AIRCRAFT CODE 726																			
KC-135A NOISE SUPPRESSOR () TEMP = 59 F) OPERATION CODE 01049																			
A/M32-52 () MILITARY POWER (WET)) BAR PRESS = 29.92 IN HG) PROFILE VERSION A																			
() 96% RPM, INBOARD ENGINE) REL HUMID = 70 %) 28 NOV 79																			
() SUPPRESSED GROUND RUNUP) DELTA N = 0.0 DB) PAGE C3																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
90	90	82	93	89	92	95	98	97	95	97	97	94	99	99	96	88	84	76	
63	89	88	91	88	90	88	88	92	93	96	98	100	98	100	94	90	86	81	
80	89	87	89	86	90	89	89	90	92	94	95	95	100	97	92	86	86	76	
100	88	90	88	90	91	90	90	90	92	94	96	99	99	97	91	85	87	75<	
125	88	90	85	86	88	89	88	90	92	93	97	99	102	98	91	84	89	75<	
160	86	88	87	86	87	88	90	90	91	95	98	99	101	96	91	84	89	74	
200	84	84	84	84	85	86	87	88	90	92	94	97	99	95	90	83	83	72	
250	85	85	84	83	86	85	85	87	89	89	91	98	99	96	92	84	83	75	
315	85	85	84	83	85	84	83	85	87	90	92	100	100	98	96	91	84	75	
400	83	84	81	80	83	82	81	83	85	90	92	100	101	98	95	91	83	75	
500	82	82	79	78	80	80	79	83	85	91	96	99	101	97	95	92	84	77	
630	79	80	76	77	76	78	80	83	85	90	95	98	97	96	93	90	82	74	
800	79	80	76	77	76	78	80	84	90	94	99	97	94	92	88	82	74	72	
1000	77	78	74	75	75	79	80	84	90	93	99	95	93	91	87	81	73	71	
1250	77	77	72	73	73	77	79	83	89	92	98	94	93	91	87	81	72	70	
1600	77	78	72	73	74	79	80	84	89	92	98	94	93	91	87	82	73	70	
2000	78	79	74	74	75	79	81	84	89	91	97	93	92	91	87	82	74	70	
2500	83	83	77	77	78	82	84	87	89	90	96	93	92	91	86	82	74	70	
3150	85	86	81	81	82	85	88	89	90	90	95	92	91	91	87	82	73	70	
4000	79	81	76	74	77	81	83	87	86	88	94	90	90	88	84	80	71	68	
5000	75	77	73	71	72	76	79	81	82	83	89	86	86	84	81	75	67	63	
6300	74	76	73	70	71	77	78	80	81	81	88	84	84	84	81	75	66	62	
8000	70	72	69	66	70	73	75	78	77	77	83	80	82	84	84	79	65	58	
10000	67	69	65	64	67	70	70	73	74	73	80	77	77	76	75	68	59	54	
OVERALL	98	98	97	98	98	99	100	102	101	104	106	111	111	111	108	104	97	96	87

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
KC-135A NOISE SUPPRESSOR																			
A/M32-52																			
(OPERATION:																			
MILITARY POWER (MET)																			
96% RPM, INBOARD ENGINE																			
SUPPRESSED GROUND RUNUP																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-726-001																			
AIRCRAFT CODE 726																			
OPERATION CODE 81049																			
PROFILE VERSION A																			
20 NOV 79																			
PAGE D3																			
ANGLE (DEGREES)																			
DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
(FEET)																			
200	118.5	111.2	107.3	107.3	106.4	110.0	112.5	114.7	109.6	116.0	118.1	123.5	121.3	120.3	119.3	115.4	109.7	103.3	98.2
250	108.3	100.9	105.1	105.0	106.2	108.6	110.2	112.5	107.4	113.7	115.9	121.3	119.1	118.7	117.1	113.2	107.5	101.1	95.9
315	106.0	106.6	102.6	102.7	103.9	106.3	107.9	110.2	105.1	111.5	113.6	119.0	116.9	116.5	114.8	110.9	105.2	98.8	93.5
400	103.6	104.2	100.4	100.4	101.5	103.9	105.5	107.0	102.0	109.1	111.3	116.7	114.6	114.2	112.5	108.5	102.0	96.5	91.1
500	101.1	101.7	97.9	97.9	99.8	101.4	103.0	105.3	100.4	106.7	108.9	114.3	112.2	111.0	108.0	106.0	100.2	94.8	88.6
630	98.5	99.1	95.2	95.2	96.4	98.7	100.3	102.6	97.0	104.2	106.4	111.8	109.7	109.3	107.5	103.4	97.6	91.5	86.0
800	95.6	96.3	92.4	92.4	93.5	95.9	97.5	99.0	95.0	101.5	103.0	109.2	107.2	106.7	104.0	100.7	94.0	88.0	83.2
1000	92.6	93.2	89.4	89.4	90.5	92.9	94.4	96.0	92.1	98.7	101.0	106.4	104.7	103.9	102.0	97.7	91.0	85.0	80.3
1250	89.4	90.0	86.1	86.1	87.2	89.6	91.1	92.5	88.9	95.6	98.0	103.4	101.9	100.9	99.0	94.5	88.6	82.7	77.3
1600	85.0	86.4	82.5	82.6	83.6	85.9	87.5	89.9	85.9	92.2	94.7	100.1	99.0	97.6	95.6	91.2	85.3	79.3	73.9
2000	81.9	82.5	78.6	78.6	79.7	82.0	83.6	86.0	82.2	88.6	91.0	96.7	95.9	94.4	92.0	87.9	81.6	75.6	70.4
2500	77.5	78.1	74.1	74.3	75.3	77.6	79.1	81.6	78.4	84.8	87.0	93.0	92.2	90.5	88.4	84.3	77.6	71.4	66.4
3150	72.0	73.2	69.2	69.3	70.3	72.7	74.2	77.0	74.3	80.4	82.9	88.9	88.2	86.4	84.3	80.2	73.3	67.1	61.9
4000	67.5	67.9	64.8	64.8	65.3	67.2	68.6	71.0	68.0	74.0	76.0	82.4	81.7	80.0	79.7	75.7	68.5	62.2	57.1
5000	62.8	62.5	58.7	58.5	59.9	61.6	63.0	66.2	64.7	70.7	72.2	78.0	77.0	77.0	74.9	70.8	63.4	56.9	51.7
6300	58.4	57.8	53.8	52.9	54.2	55.8	57.3	60.7	59.4	65.1	66.7	72.8	71.9	71.9	69.7	65.6	58.1	51.2	45.6
8000	51.0	52.3	48.3	47.0	49.5	50.9	52.3	55.9	54.1	60.0	61.5	67.3	66.0	67.9	65.6	61.5	53.6	46.3	40.5
10000	46.5	47.2	42.9	42.3	44.4	45.3	46.3	50.4	50.3	56.0	57.2	63.0	61.6	63.6	61.3	57.0	49.4	41.1	34.5
12500	40.6	41.4	36.9	35.0	38.4	39.4	40.8	44.2	44.5	50.0	51.0	56.8	55.1	56.9	54.5	51.9	42.6	34.9	27.9
16000	33.5	34.0	29.3	28.4	31.0	31.9	32.5	37.1	38.1	43.5	44.9	50.7	49.2	50.1	46.2	36.8	26.7	18.7	
20000	25.7	26.4	19.8	18.3	21.0	22.4	22.3	30.0	31.1	36.0	37.5	43.1	42.0	42.0	39.4	28.2	18.5	9.5	
25000	13.1	13.5	10.2	0.1	10.7	9.3	0.0	16.2	20.0	29.9	30.7	36.7	36.7	36.9	37.4	31.3	16.1	2.3	

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: KC-135A NOISE SUPPRESSOR																			
OPERATION: MILITARY POWER (NET)																			
96% RPM, INBOARD ENGINE																			
SUPPRESSED GROUND RUNUP																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.1	94.9	90.8	90.5	91.7	94.3	96.1	98.9	94.5	101.9	104.8	110.3	108.1	106.6	104.6	100.8	94.9	88.1	83.8
250	91.9	92.7	88.6	88.3	89.6	92.0	93.9	96.7	92.4	99.7	102.6	108.1	106.0	104.5	102.5	98.7	92.7	86.0	81.7
315	89.7	90.4	86.4	86.1	87.3	89.8	91.6	94.4	90.3	97.5	100.5	106.0	103.8	102.4	100.3	96.5	90.5	83.8	79.5
400	87.4	88.1	84.1	83.8	85.1	87.4	89.2	92.1	88.1	95.3	98.3	103.8	101.7	100.2	98.1	94.2	88.2	81.6	77.3
500	85.0	85.7	81.7	81.5	82.7	85.0	86.8	89.6	85.6	93.0	96.1	101.5	99.5	97.9	95.8	91.9	85.9	79.4	75.0
630	82.6	83.3	79.3	79.0	80.3	82.5	84.2	87.1	83.5	90.7	93.8	99.2	97.2	95.6	93.5	89.6	83.5	77.0	72.7
800	80.0	80.7	76.7	76.5	77.8	79.9	81.6	84.5	81.1	88.3	91.4	96.8	94.9	93.2	91.1	87.2	81.0	74.5	70.3
1000	77.3	78.0	74.1	73.9	75.1	77.2	78.8	81.8	78.7	85.8	89.0	94.4	92.5	90.8	88.6	84.7	78.5	72.0	67.8
1250	74.5	75.2	71.3	71.1	72.3	74.4	75.9	78.9	76.1	83.2	86.5	91.8	90.0	88.2	86.0	82.2	75.8	69.2	65.2
1500	71.6	72.2	68.3	68.2	69.4	71.3	72.8	75.9	73.4	80.5	83.9	89.2	87.5	85.5	83.3	79.5	73.1	66.4	62.5
2000	68.5	69.2	65.2	65.1	66.3	68.2	69.6	72.7	70.6	77.7	81.2	86.4	84.8	82.8	80.5	76.7	70.2	63.4	59.8
2500	65.1	65.8	61.8	61.8	62.9	64.8	66.1	69.3	67.5	74.7	78.3	83.4	81.8	79.7	77.5	73.7	67.1	60.1	56.7
3150	61.4	62.1	58.1	58.2	59.1	61.1	62.4	65.8	64.2	71.4	75.1	80.1	78.5	76.4	74.1	70.3	63.7	56.5	53.3
4000	57.4	58.2	54.1	54.3	55.0	57.1	58.4	61.9	60.6	67.8	71.5	76.5	74.8	72.7	70.4	66.6	60.0	52.6	49.6
5000	53.1	53.9	49.8	49.8	50.6	52.8	54.1	57.7	56.5	63.8	67.5	72.4	70.6	68.5	66.2	62.5	55.8	48.3	45.5
6300	48.5	49.4	45.2	45.5	46.0	48.3	49.6	53.2	52.1	59.4	63.2	68.1	66.2	64.1	61.8	58.1	51.4	43.8	41.1
8000	44.5	45.4	41.4	41.6	42.2	44.1	45.3	48.9	48.3	55.3	59.1	63.9	62.4	60.1	57.9	54.1	47.2	39.9	37.0
10000	40.4	41.2	37.4	37.5	38.2	39.8	40.8	44.3	44.2	50.8	54.8	59.4	58.2	55.9	53.6	49.9	42.8	35.8	32.7
12500	36.7	37.1	33.1	33.1	34.0	35.2	36.1	39.4	39.7	46.0	50.1	54.5	53.8	51.3	49.1	45.3	38.1	31.4	28.0
15000	31.2	31.9	28.5	28.4	29.5	30.3	31.0	34.1	34.0	40.7	44.9	49.1	48.9	46.4	44.1	40.4	33.8	26.9	22.9
20000	26.1	26.7	23.7	23.5	24.8	25.3	25.8	28.6	28.6	35.0	39.2	43.3	43.6	41.1	38.8	35.0	27.5	22.2	17.5
25000	20.9	21.4	18.8	18.6	19.9	20.2	20.5	23.0	23.1	28.9	33.0	37.1	37.8	35.4	33.1	29.2	21.6	17.5	11.7

IDENTIFICATION:

OMEGA 8.2

TEST 77-726-001

RUN 03

AIRCRAFT CODE 726

OPERATION CODE 01049

PROFILE VERSION A

28 NOV 79

PAGE F3

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 70 %

DELTA N = 8.0 DB

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT: KC-135A NOISE SUPPRESSOR A/W32-52
 OPERATION: MILITARY POWER (NET) 96% RPM, INBOARD ENGINE SUPPRESSED GROUND RUNUP
 METEOROLOGY: TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 8.0 DB
 AIRCRAFT CODE 726 OPERATION CODE 81049 PROFILE VERSION A 28 NOV 79 PAGE J3
 IDENTIFICATIONS: OMEGA 8.2 TEST 77-726-001 RUN 03

	P=PNLT										T=ALT									
	A=AL																			
	30	40	50	60	70	80	90	100	110	120	130									
0																				
10																				
20																				
30																				
40																				
50																				
60																				
70																				
80																				
90																				
100																				
110																				
120																				
130																				
140																				
150																				
160																				
170																				
180																				

A N G L E I N D E G R E E S

[illegible][illegible]

USAF
USAF
USAF
USAF
USAF
USAF
USAF

NOISE PRODUCED ON THE GROUND BY
F-4 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS	
USAF	USAF
USAF	USAF
USAF	USAF
USAF	USAF

TEST 77-731-081
AIRCRAFT CODE: 731
PROFILE PROGRAM: A
COMPUTER PROGRAM OMEGA A-2

Power Setting	Page
Engine Runup, 85% RPM	74-79

	USAF	
Military Power, 98.5% RPM	USAF	80-85
Afterburner Power	USAF	86-91
	USAF	
	USAF	
	USAF	
	USAF	

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY

	NORM	USAF
	SPL AT 250 FEET	USAF
	NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE	USAF
	PERCEIVED NOISE LEVEL	USAF
	TONE-CORRECTED, PERCEIVED NOISE LEVEL	USAF

A-WEIGHTED OVERALL SOUND LEVEL
TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

[illegible][illegible]

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand what consumers want and what problems they are facing. Once a need is identified, the next step is to develop a concept that addresses this need. This is often done through brainstorming sessions with a team of designers and engineers. The concept is then refined through prototyping and testing, ensuring that it meets the requirements of the market. Finally, the product is launched into the market, and its performance is monitored to ensure it continues to meet the needs of consumers.

) IDENTIFICATION:)																			
) OMEGA 8.2)																			
) TEST 77-731-001)																			
) RUN 01)																			
) AIRCRAFT CODE 731)																			
) OPERATION CODE 00118)																			
) PROFILE VERSION A)																			
) 28 NOV 79)																			
) PAGE C1)																			
) METEOROLOGY:)																			
) TEMP = 59 F)																			
) BAR PRESS =29.92 IN HG)																			
) REL HUMID = 70 %)																			
) DELTA N = 0.0 DB)																			
) ANGLE (DEGREES))																			
) BAND CENTER)																			
) FREQ (HZ))																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
73	72	69	71	73	76	72	75	74	71	72	74	74	75	86	75	75	75	74	
73	71	70	69	73	73	73	73	74	71	74	73	76	77	82	76	76	76	75	
71	67	68	69	73	73	72	74	74	67	69	73	76	77	83	77	73	72	72	
74	70	71	73	74	75	76	74	74	70	70	72	77	77	82	75	75	74	74	
73	70	72	73	75	73	72	72	73	71	71	72	75	75	80	75	75	73	73	
77	73	72	73	75	72	71	72	72	74	75	75	76	76	78	79	77	76	76	
200	73	72	73	74	74	75	73	72	73	74	73	76	76	79	77	78	75	74	
250	78	75	73	75	74	75	72	72	72	75	73	73	75	76	77	78	74	74	
315	75	74	75	75	76	80	77	76	74	73	76	75	76	75	77	76	77	76	
400	69	67	70	70	70	70	68	67	67	68	68	71	71	72	73	74	72	70	
500	70	69	71	71	69	73	70	67	65	65	65	68	68	70	68	69	68	67	
630	66	65	67	67	68	72	69	67	68	64	65	66	65	67	67	67	65	63	
800	69	65	67	69	70	73	69	67	66	64	63	63	63	69	65	65	63	59	
1000	72	67	68	70	73	74	70	66	63	64	63	63	62	69	64	61	59	58	
1250	70	65	67	69	73	73	68	66	64	63	64	61	63	62	66	65	61	60	
1600	69	65	68	68	70	70	68	65	63	62	63	59	63	64	67	67	65	62	
2000	73	69	69	70	70	68	66	64	65	64	63	67	68	69	70	69	68	65	
2500	74	69	69	71	71	70	68	66	64	66	65	68	69	72	72	71	68	68	
3150	71	66	66	69	69	71	68	64	64	63	65	68	69	69	73	75	74	70	
4000	73	64	66	70	70	72	67	66	64	67	63	64	68	67	69	72	71	68	
5000	71	61	64	67	67	69	64	63	60	62	60	63	64	66	68	68	68	64	
6300	68	58	61	64	64	66	61	60	58	60	57	58	61	59	61	64	65	61	
8000	64	54	57	60	59	62	57	55	53	54	52	55	56	55	62	61	62	59	
10000	64	54	57	56	55	57	52	49	47	48	46	49	50	49	55	57	62	61	
OVERALL	86	83	83	84	86	87	85	84	84	82	84	84	86	86	91	87	87	86	85

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-4 NOISE SUPPRESSOR																			
AF32A-14																			
OPERATIONS:																			
ENGINE RUNUP 85% RPM																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
AIRCRAFT CODE 731																			
OPERATION CODE 00118																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE F1																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-731-031																			
RUN 01																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	85.1	80.4	81.4	82.9	84.0	85.3	82.0	79.8	78.6	78.6	78.7	78.2	80.6	80.3	82.8	83.8	83.7	83.2	80.6
250	82.9	78.2	79.3	80.8	81.9	83.1	79.9	77.7	76.5	76.4	76.6	76.0	78.5	78.7	80.6	81.6	81.5	81.0	78.3
315	80.6	76.0	77.1	78.5	79.7	80.9	77.7	75.5	74.4	74.2	74.5	73.9	76.3	76.5	78.4	79.4	79.2	78.7	76.1
400	78.3	73.8	74.8	76.3	77.4	78.7	75.5	73.3	72.2	71.9	72.3	71.6	74.0	74.2	76.2	77.0	76.9	76.3	73.8
500	75.9	71.5	72.5	73.9	75.1	76.4	73.2	71.0	69.9	69.6	70.0	69.4	71.7	71.9	73.9	74.6	74.5	73.9	71.4
630	73.4	69.1	70.2	71.5	72.7	74.0	70.9	68.6	67.6	67.2	67.7	67.0	69.3	69.4	71.5	72.1	72.0	71.3	68.9
800	70.8	66.7	67.8	69.0	70.3	71.6	68.5	66.2	65.2	64.7	65.3	64.5	66.8	66.9	69.0	69.5	69.4	68.7	66.3
1000	68.1	64.1	65.3	66.4	67.8	69.1	66.0	63.7	62.7	62.0	62.7	62.0	64.2	64.3	66.4	66.8	66.6	65.9	63.6
1250	65.2	61.4	62.6	63.7	65.1	66.5	63.3	61.0	60.1	59.2	60.0	59.2	61.4	61.5	63.7	63.9	63.7	62.9	60.7
1600	62.2	58.5	59.8	60.8	62.3	63.7	60.5	58.2	57.3	56.3	57.1	56.3	58.4	58.5	60.8	60.8	60.6	59.7	57.6
2000	59.1	55.5	56.9	57.9	59.4	60.8	57.6	55.2	54.4	53.3	54.0	53.2	55.3	55.4	57.8	57.6	57.4	56.3	54.4
2500	55.7	52.2	53.7	54.6	56.2	57.7	54.5	52.0	51.3	49.9	50.7	49.8	51.9	51.9	54.5	54.0	53.7	52.6	50.7
3150	52.2	48.7	50.2	51.2	52.9	54.4	51.1	48.5	47.9	46.4	47.1	46.1	48.1	48.0	50.9	50.1	49.8	48.5	46.7
4000	48.3	44.8	46.4	47.4	49.2	50.7	47.3	44.7	44.1	42.5	43.1	42.0	43.9	43.8	47.0	45.9	45.4	44.1	42.4
5000	44.1	40.5	42.1	43.3	45.2	46.7	43.2	40.6	40.0	38.2	38.8	37.6	39.4	39.3	42.8	41.3	40.7	39.3	37.6
6300	39.6	36.0	37.7	38.8	40.9	42.4	38.8	36.1	35.6	33.7	34.3	33.1	34.8	34.6	38.4	36.5	35.8	34.3	32.7
8000	35.2	31.9	33.5	34.6	36.5	38.2	34.7	32.1	31.7	29.7	30.3	29.2	30.9	30.7	34.4	32.4	31.9	30.4	28.9
10000	30.6	27.5	29.2	30.1	31.7	33.7	30.3	27.8	27.5	25.4	26.1	25.2	26.9	26.7	30.1	28.2	28.0	26.5	25.1
12500	25.6	22.8	24.5	25.3	26.6	28.8	25.6	23.1	22.9	20.9	21.6	20.9	22.7	22.5	25.6	23.9	23.9	22.4	21.1
16000	20.3	17.9	19.5	20.1	21.0	23.6	20.6	18.1	18.0	16.0	16.9	16.3	18.2	18.1	20.9	19.4	19.5	18.1	16.9
20000	14.7	12.7	14.2	14.7	15.1	17.9	15.2	12.9	12.7	11.0	12.0	11.5	13.5	13.5	16.1	14.7	14.8	13.5	12.4
25000	9.1	7.2	8.6	8.9	9.2	11.9	9.5	7.4	7.2	5.7	7.0	6.6	8.7	8.7	11.5	9.9	9.9	8.6	7.6

4. A. A FUNCTION OF ANGLE AROUND SOURCE

700 FEET

ALTITUDE
ELEVATION

IDENTIFICATION:
) OMEGA 8.2
) TEST 77-731-001
) RUN 01
) AIRCRAFT CODE 731
) OPERATION CODE 00118
) PROFILE VERSION A
) 28 NOV 79
) PAGE J1
) METEOROLOGY:
) TEMP = 59 F
) BAR PRESS = 29.92 IN HG
) REL HUMID = 70 %
) DELTA N = 0.0 DB

	P=PNLT											A=AL											T=ALT															
	0	10	20	30	40	50	60	70	80	90	100		0	10	20	30	40	50	60	70	80	90	100		0	10	20	30	40	50	60	70	80	90	100			
100																																						
110																																						
120																																						
130																																						
140																																						
150																																						
160																																						
170																																						
180																																						

NOISE LEVEL IN PNDB OR DBA

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT:																			
F-4 NOISE SUPPRESSOR																			
AF32A-14																			
OPERATION:																			
MILITARY POWER 98.5% RPM																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
METEOROLOGY:																			
AIRCRAFT CODE 731																			
OPERATION CODE 00104																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE C2																			
ANGLE (DEGREES)																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	76	74	76	76	76	79	79	79	78	79	77	79	81	81	81	82	82	82	82
63	77	76	73	75	79	79	80	81	81	81	80	78	81	82	82	81	82	82	82
80	79	76	73	78	81	79	81	80	81	81	79	80	82	82	82	79	82	81	81
100	76	75	76	79	80	79	80	81	83	79	80	81	84	83	83	83	81	80	80
125	76	76	76	80	82	84	81	82	82	78	79	79	84	82	84	83	79	79	79
150	78	77	75	76	79	78	77	79	82	80	82	79	83	82	82	81	81	79	79
200	77	77	74	76	80	81	81	78	81	82	81	79	80	82	83	83	81	83	78
250	82	81	75	77	79	81	83	80	82	82	83	81	81	83	83	83	83	81	81
315	81	79	76	78	80	83	83	80	79	81	81	80	81	81	82	81	81	78	78
400	80	79	77	77	79	81	81	80	79	81	80	80	81	80	81	82	82	78	78
500	78	78	77	76	77	78	78	77	79	77	76	76	78	78	78	79	78	75	75
630	76	76	75	75	76	77	76	77	78	77	76	74	75	75	74	76	75	72	72
800	77	79	77	77	79	79	79	78	75	75	73	73	74	74	75	74	73	72	72
1000	77	78	76	77	78	77	77	76	74	73	72	72	70	70	71	70	69	68	68
1250	75	77	75	75	77	77	76	75	76	72	72	71	71	72	71	73	71	70	70
1600	73	77	74	74	75	75	75	74	71	71	70	71	71	72	72	73	72	70	70
2000	75	78	74	75	75	75	73	72	69	69	69	71	73	73	73	74	73	72	72
2500	74	77	73	72	72	72	71	69	67	69	71	70	73	74	74	73	74	74	74
3150	75	77	74	75	73	74	72	70	68	70	71	72	73	75	74	74	76	75	75
4000	74	76	73	72	72	74	72	72	72	70	72	72	75	76	75	76	77	74	74
5000	72	75	69	68	69	71	69	68	68	67	68	68	69	70	69	69	71	69	69
6300	68	71	66	64	65	66	65	64	64	63	64	64	66	67	66	66	68	66	66
8000	66	67	62	61	62	65	61	60	60	58	59	59	61	61	61	62	64	64	64
10000	59	61	56	55	55	57	54	53	52	51	51	52	53	51	53	56	61	64	64
OVERALL	91	91	88	89	91	92	92	91	92	91	91	91	91	93	93	93	93	91	91

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			IDENTIFICATION:	
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			OMEGA 8.2	
NOISE SOURCE/SUBJECT:																			TEST 77-731-001	
F-4 NOISE SUPPRESSOR																			RUN 02	
AF32A-14																			AIRCRAFT CODE 731	
(OPERATION CODE 00104	
(PROFILE VERSION A	
(28 NOV 79	
(PAGE E2	
(
DISTANCE																			ANGLE (DEGREES)	
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	103.7	104.5	101.4	101.8	102.2	104.1	102.8	102.5	102.6	102.4	100.4	100.8	101.6	103.3	104.4	104.1	104.7	103.9	102.1	
250	101.4	102.2	99.2	99.6	99.9	101.8	100.6	100.3	100.3	100.1	98.2	98.5	99.3	101.7	102.1	101.9	102.5	101.6	99.9	
315	99.1	99.9	96.9	97.2	97.6	99.5	98.3	97.9	98.0	97.8	95.8	96.2	97.0	99.3	99.8	99.5	100.1	99.2	97.5	
400	96.7	97.5	94.4	94.8	95.3	97.1	95.9	95.5	95.6	95.4	93.4	93.8	94.5	96.9	97.3	97.1	97.7	96.8	95.1	
500	94.2	95.0	91.9	92.3	92.8	94.6	93.4	92.9	93.0	92.8	91.0	91.2	92.0	94.4	94.8	94.6	95.1	94.3	92.6	
630	91.5	92.3	89.3	89.7	90.1	92.0	90.8	90.3	90.3	90.3	88.6	88.5	89.4	91.6	92.1	91.9	92.4	91.6	89.9	
800	88.7	89.5	86.5	86.9	87.4	89.2	88.0	87.5	87.5	87.7	86.0	85.9	86.9	88.7	89.3	89.1	89.5	88.8	87.1	
1000	85.8	86.5	83.5	84.0	84.5	86.3	85.3	84.9	84.8	85.1	83.3	83.2	84.2	85.7	86.3	86.2	86.6	85.8	84.0	
1250	82.5	83.3	80.3	80.8	81.5	83.2	82.4	82.0	82.0	82.3	80.5	80.4	81.4	82.6	83.1	83.3	83.8	83.5	80.8	
1500	79.3	80.1	76.9	77.3	78.3	80.2	79.4	79.1	79.0	79.3	77.5	77.4	78.4	79.6	79.9	80.2	80.8	79.3	77.2	
2000	76.1	76.6	73.4	73.9	75.0	77.0	76.3	75.9	75.8	76.2	74.4	74.2	75.2	76.3	76.7	77.0	77.6	76.1	73.6	
2500	72.2	72.7	69.6	70.0	71.1	73.1	72.4	72.0	71.9	72.3	70.4	70.2	71.3	72.3	72.7	73.0	73.6	72.1	69.5	
3150	67.7	68.3	65.3	65.6	67.0	68.7	67.9	67.5	67.7	67.8	66.0	65.7	66.8	67.8	68.1	68.5	69.1	67.5	64.9	
4000	62.8	63.5	61.1	61.1	62.7	63.9	63.4	63.0	62.9	62.7	60.9	60.7	61.6	62.8	62.9	63.2	63.7	62.4	59.7	
5000	57.5	58.5	56.3	56.3	57.9	58.9	58.6	58.0	57.8	57.3	55.7	54.9	55.9	57.3	57.4	57.6	58.1	56.7	54.0	
6300	52.1	53.3	50.8	50.8	52.6	53.5	53.3	52.6	52.4	51.6	50.1	49.2	49.4	51.4	51.6	51.7	52.3	50.8	47.8	
8000	46.9	48.0	45.6	45.3	47.7	48.3	48.3	47.3	47.1	46.9	45.2	44.4	44.6	46.3	46.5	46.7	47.3	46.3	42.6	
10000	41.5	42.3	39.7	39.5	41.8	42.6	42.7	41.5	41.4	41.4	39.8	38.7	39.2	40.9	40.9	41.1	41.6	40.7	36.8	
12500	35.6	36.3	33.6	32.8	34.6	36.1	36.2	35.5	34.8	35.7	33.7	32.8	33.2	34.7	34.7	35.1	35.3	34.8	30.0	
15000	28.8	29.1	26.3	24.8	27.6	29.7	29.6	29.1	27.7	28.8	26.6	26.3	26.9	27.6	28.3	28.4	29.4	28.5	22.5	
20000	18.0	19.2	15.6	12.4	17.1	20.6	20.6	18.5	16.3	19.1	16.1	15.0	16.5	17.5	16.9	18.0	19.5	17.9	11.6	
25000	7.2	9.4	4.9	.1	6.6	11.6	11.7	7.9	4.9	9.4	5.7	3.7	6.1	7.5	5.5	7.6	7.5	7.2	.6	

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

IDENTIFICATIONS:
 OMEGA 8.2
 TEST 77-731-001
 RUN 02
 AIRCRAFT CODE 731
 OPERATION CODE 00104
 PROFILE VERSION A
 28 NOV 79
 PAGE J2

METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB

OPERATIONS:
 MILITARY POWER 98.5% RPM
 SINGLE ENGINE
 GROUND RUNUP (SUPPRESSED)

T=ALT

A=AL

P=PNLT

	10	20	30	40	50	60	70	80	90	100	110
0
10	X	.	P
20	X	.	P
30	X	.	P
40	X	.	P
50	AT	.	P
60	X	.	P
70	AT	.	P
80	AT	.	P
90	AT	.	P
100	X	.	P
110	X	.	P
120	AT	.	P
130	AT	.	P
140	AT	.	P
150	AT	.	P
160	AT	.	P
170	X	.	P
180	X	.	P

ANGLE IN PND8 OR DBA

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																	IDENTIFICATION:			
1/3 OCTAVE BAND																	OMEGA 8.2			
DISTANCE = 250 FEET																	TEST 77-731-001			
																	RUN 03			
(NOISE SOURCE/SUBJECT:																	METEOROLOGY:			
(F-4 NOISE SUPPRESSOR																	TEMP = 59 F			
(AF32A-14																	BAR PRESS =29.92 IN HG			
																	REL HUMID = 70 %			
																	DELTA N = 0.0 DB			
																	PAGE C3			
BAND CENTER																	ANGLE (DEGREES)			
FREQ (HZ)																				
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	89	88	88	88	89	90	88	87	86	85	86	88	87	88	88	86	86	87	84	86
63	83	82	80	82	85	85	87	87	85	84	83	84	85	89	86	85	85	86	83	85
80	82	81	79	82	85	85	86	89	86	85	85	87	87	89	87	84	83	83	83	83
100	81	81	78	81	83	85	86	89	88	85	88	89	90	91	88	86	86	86	83	84
125	80	80	81	84	86	84	84	89	86	82	86	89	89	89	86	84	83	83	83	84
160	82	79	79	82	87	86	88	89	85	84	84	86	88	87	85	86	86	86	84	83
200	81	80	80	80	83	83	84	88	85	84	85	84	88	87	88	86	86	84	83	83
250	86	82	79	82	83	85	89	87	85	84	84	83	86	85	86	85	86	82	82	83
315	82	78	79	79	82	86	88	87	85	84	84	85	86	84	84	83	85	83	83	83
400	81	77	77	79	80	83	85	84	83	79	82	82	84	84	85	85	84	84	84	81
500	82	76	76	77	79	81	83	84	82	79	80	79	81	81	81	80	83	82	79	79
630	81	76	78	79	81	81	84	83	82	81	80	79	80	81	80	80	81	80	80	88
800	80	77	79	80	83	82	84	85	82	81	80	79	80	79	80	78	78	78	79	79
1000	81	77	79	82	83	82	83	82	81	80	78	77	77	77	77	77	77	75	75	75
1250	77	73	77	79	79	80	80	80	79	77	76	76	76	76	77	77	76	75	74	74
1600	76	74	77	79	79	79	79	80	78	75	74	73	74	77	78	78	78	78	76	76
2000	75	75	77	78	78	77	76	76	74	73	73	72	74	74	76	76	76	76	75	75
2500	74	75	76	76	76	75	74	76	74	72	72	74	74	74	77	76	76	78	77	75
3150	75	75	77	79	77	77	76	75	74	73	74	75	77	77	77	76	78	76	75	75
4000	72	72	73	76	75	75	73	75	74	74	73	74	75	76	77	76	78	76	74	74
5000	70	70	70	73	73	73	71	71	71	70	69	70	72	71	72	72	72	70	70	70
6300	67	66	68	70	69	70	66	69	68	67	67	68	69	68	69	68	69	66	66	66
8000	63	62	64	66	65	67	62	63	62	62	61	61	62	63	65	63	65	62	61	61
10000	58	58	59	60	59	60	56	55	55	54	53	53	54	55	59	57	59	59	59	59
OVERALL	95	93	93	94	96	97	98	99	96	95	96	97	98	98	97	96	96	96	95	94

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: F-4 NOISE SUPPRESSOR AF32A-14																			
(OPERATION: AFTERBURNER POWER SINGLE ENGINE GROUND RUNUP (SUPPRESSED))																			
(TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB)																			
(METEOROLOGY: AIRCRAFT CODE 731 OPERATION CODE 00103 PROFILE VERSION A 28 NOV 79 PAGE 03)																			
(IDENTIFICATION: OMEGA 8.2 TEST 77-731-001 RUN 83)																			
ANGLE (DEGREES)																			
DISTANCE (FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.3	103.8	104.5	106.2	106.3	106.6	106.4	106.6	105.3	104.2	104.1	104.8	106.2	106.5	106.5	105.5	106.7	105.1	104.2
250	102.1	100.7	102.2	103.9	104.1	104.4	104.2	104.7	103.0	101.9	101.9	102.6	104.0	104.3	104.2	103.3	104.4	102.0	101.9
315	99.8	98.4	99.9	101.6	101.8	102.1	102.0	102.4	100.6	99.6	99.6	100.3	101.8	102.0	101.9	101.0	102.1	100.5	99.5
400	97.4	96.0	97.5	99.2	99.4	99.7	99.8	100.2	98.4	97.2	97.3	97.9	99.4	99.6	99.5	98.6	99.8	98.2	97.3
500	94.9	93.5	95.0	96.7	96.9	97.3	97.5	97.9	96.0	94.7	94.8	95.5	97.0	97.2	97.1	96.2	97.3	95.7	94.8
630	92.3	90.8	92.3	94.1	94.3	94.7	95.0	95.5	93.5	92.2	92.3	92.9	94.4	94.5	94.5	93.6	94.7	93.2	92.2
800	89.6	88.0	89.6	91.3	91.5	91.9	92.5	93.0	91.0	89.6	89.6	90.4	91.6	91.9	91.8	91.0	91.9	90.5	89.4
1000	86.7	85.1	86.6	88.3	88.6	89.1	89.8	90.3	88.2	86.9	86.8	87.6	88.7	89.1	89.1	88.3	89.0	87.7	86.5
1250	83.8	81.9	83.4	85.1	85.5	86.0	86.8	87.2	85.3	83.8	83.9	84.5	85.7	86.2	86.3	85.5	85.8	84.6	83.4
1600	80.8	78.5	80.0	81.6	82.3	82.9	83.9	84.1	82.3	80.5	80.9	81.2	82.6	83.2	83.3	82.5	82.8	81.9	80.2
2000	77.6	74.9	76.3	77.9	78.8	79.7	80.7	80.8	79.1	77.0	77.7	77.9	79.4	80.0	80.0	79.3	79.6	78.7	77.0
2500	74.1	70.9	72.4	74.2	75.2	75.8	76.9	77.3	75.3	73.5	73.7	74.0	75.4	76.0	76.1	75.4	75.6	74.8	73.1
3150	70.0	66.5	68.2	70.0	71.3	71.4	72.7	73.2	71.3	69.6	69.5	69.5	70.9	71.6	71.7	70.9	71.4	70.4	68.9
4000	65.5	61.8	63.8	65.3	66.9	66.9	68.2	68.9	66.8	65.2	64.9	64.4	66.0	66.5	66.7	66.0	66.7	65.4	64.3
5000	60.4	56.8	58.9	60.4	62.2	62.1	63.5	64.2	62.0	60.4	60.0	59.4	60.8	61.3	61.3	60.5	61.7	60.4	59.3
6300	55.1	51.2	53.6	55.2	56.9	56.8	58.3	59.0	56.9	55.2	54.7	54.0	55.4	55.9	55.8	55.0	56.2	55.0	53.7
8000	50.7	45.7	48.5	50.2	52.2	52.2	53.8	54.6	52.3	50.5	50.1	49.1	51.2	51.5	51.6	50.4	51.9	50.5	49.0
10000	45.0	39.9	42.6	44.2	46.9	46.7	48.7	49.6	47.1	44.9	44.0	43.9	46.1	46.5	46.6	45.8	46.9	45.5	43.5
12500	43.0	33.2	35.6	37.2	40.3	40.8	43.2	44.4	41.3	38.8	38.5	38.4	40.6	41.0	40.7	39.6	41.4	39.6	37.5
16000	33.8	24.9	28.3	29.5	32.7	33.8	36.7	38.1	34.8	31.9	32.1	31.1	34.6	34.2	34.1	33.3	35.8	32.5	30.4
20000	25.2	13.9	16.8	18.5	22.1	25.2	29.8	30.2	26.6	22.3	23.3	22.0	25.9	25.7	26.5	25.6	27.4	25.2	21.7
25000	11.6	3.0	5.3	7.5	7.2	12.1	18.2	19.6	13.3	12.6	10.0	7.5	12.7	13.0	14.9	14.1	15.1	13.9	13.0

[illegible]

NOISE PRODUCED ON THE GROUND BY

F-5 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-746-001
AIRCRAFT CODE: 746
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

<u>Power Setting</u>	<u>Page</u>
Engine Runup, 80% RPM	93-98
Military Power, 101% RPM	99-104
Afterburner Power	105-110

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
 NORMALIZED SPL AT 250 FEET
 NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
 PERCEIVED NOISE LEVEL
 TONE-CORRECTED, PERCEIVED NOISE LEVEL
 A-WEIGHTED OVERALL SOUND LEVEL
 TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
 NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACEL MEDICAL RESEARCH LABORATORY
AEROSPACE HETTERSON AIR FORCE BASE, OHIO

F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR
F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR
F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR	F-5	NOISE SUPPRESSOR

AD-A083 701

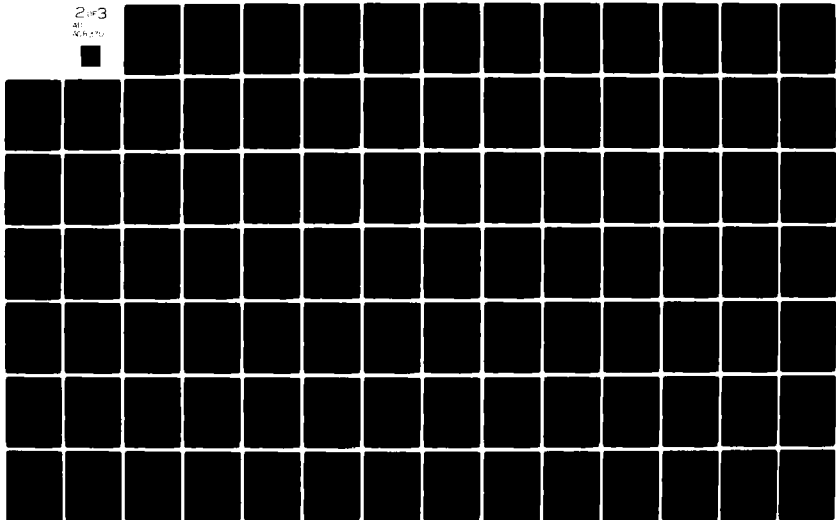
AIR FORCE AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATT--ETC F/G 1/2
COMMUNITY NOISE EXPOSURE RESULTING FROM AIRCRAFT OPERATIONS. V0--ETC(U)
DEC 79 R A LEE
AMRL-TR-73-110-VOL-7

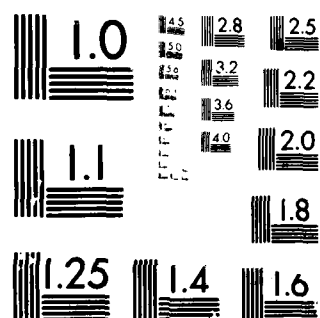
UNCLASSIFIED

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2 of 3

AD-A083 701





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

(TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB) (1/3 OCTAVE BAND (DISTANCE = 250 FEET (NOISE SOURCE/SUBJECT: (F-5 NOISE SUPPRESSOR (AF32A-10 (NOISE SOURCE/SUBJECT: (MILITARY POWER 101% RPM (SINGLE ENGINE (GROUND RUNUP (SUPPRESSED) (
) IDENTIFICATION:) OMEGA 8.2) TEST 77-746-001) RUN 82) AIRCRAFT CODE 746) OPERATION CODE 80104) PROFILE VERSION A) 28 NOV 79) PAGE C2																
) METEOROLOGY:) TEMP = 59 F) BAR PRESS = 29.92 IN HG) REL HUMID = 70 %) DELTA N = 0.0 DB																
) BAND CENTER (FREQ (HZ)																
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
	88	88	88	87	89	90	88	93	93	93	91	91	92	93	93	93
(50	88	88	88	87	89	90	88	93	93	93	91	91	92	93	93	93
(63	84	87	88	88	89	88	87	90	90	90	92	91	91	92	92	92
(80	88	87	89	87	88	87	86	90	91	90	91	91	92	93	92	93
(100	82	81	81	80	79	81	81	84	87	84	84	85	84	86	87	86
(125	81	84	81	83	84	83	80	82	81	82	82	82	84	87	88	87
(150	80	80	79	80	79	77	77	80	80	79	79	80	83	82	83	84
(200	77	76	76	75	73	74	75	77	77	79	79	77	77	79	78	79
(250	75	76	74	73	72	73	72	76	76	76	77	76	76	76	76	75
(315	74	75	72	72	73	72	71	73	73	74	74	74	72	71	70	71
(400	75	77	72	75	73	71	70	72	71	72	74	71	71	71	70	70
(500	69	70	67	71	71	70	68	71	70	70	71	70	68	68	69	69
(630	66	69	64	67	70	66	66	69	69	69	68	68	65	66	67	66
(800	69	70	67	71	72	69	69	70	69	70	69	68	67	68	69	68
(1000	70	71	67	70	69	69	69	69	70	70	70	68	70	68	69	69
(1250	69	71	67	71	70	70	69	69	71	71	71	70	70	69	70	71
(1600	69	70	66	69	69	68	68	70	70	70	70	70	69	67	67	67
(2000	71	73	66	71	74	67	68	67	68	68	67	66	66	65	68	67
(2500	66	69	64	68	69	63	64	64	65	64	64	63	63	63	65	64
(3150	65	67	64	66	67	63	64	64	64	63	63	62	62	61	62	63
(4000	64	65	61	62	65	62	62	66	64	62	63	62	61	62	63	62
(5000	58	59	56	57	59	56	57	59	57	56	55	55	55	54	55	56
(6300	59	56	52	54	56	54	53	56	52	52	51	50	52	54	52	54
(8000	58	53	51	50	53	52	50	54	49	50	48	48	52	54	50	52
(10000	50	50	50	50	50	50	50	47	47	47	47	47	47	52	52	52
(OVERALL	93	94	94	93	94	94	93	97	97	97	97	97	97	98	98	99

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT:																
F-5 NOISE SUPPRESSOR																
AF32A-18																
OPERATION:																
MILITARY POWER 101X RPM																
SINGLE ENGINE																
GROUND RUNUP (SUPPRESSED)																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 0.0 DB																
IDENTIFICATIONS:																
OMEGA 8.2																
TEST 77-746-001																
AIRCRAFT CODE 746																
OPERATION CODE 08104																
PROFILE VERSION A																
20 NOV 79																
PAGE E2																
DISTANCE																
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
200	99.1	100.1	97.1	98.4	100.5	97.4	96.1	100.4	99.2	98.7	98.9	98.7	98.6	101.1	101.0	100.7
250	96.9	97.9	95.0	96.2	98.3	95.2	93.9	98.3	97.1	96.6	96.8	96.6	96.7	99.0	98.9	98.6
315	94.6	95.7	92.7	94.0	96.0	92.8	91.5	96.2	95.0	94.4	94.7	94.5	94.6	96.9	96.8	96.4
400	92.2	93.3	90.3	91.6	93.7	90.4	89.1	93.8	92.8	92.1	92.4	92.2	92.4	94.7	94.6	94.2
500	89.7	90.9	87.8	89.2	91.3	87.9	86.6	91.4	90.3	89.6	90.0	89.8	89.9	92.4	92.3	92.0
630	87.1	88.3	85.2	86.6	88.7	85.3	84.0	88.8	87.7	87.1	87.4	87.2	87.3	89.8	89.7	89.5
800	84.5	85.7	82.6	84.0	86.1	82.7	81.4	86.1	85.1	84.4	84.8	84.6	84.7	87.2	87.0	86.7
1000	81.7	82.9	79.8	81.2	83.3	79.9	78.6	83.4	82.4	81.7	82.1	81.9	82.0	84.4	84.3	83.9
1250	78.5	79.9	76.5	78.2	80.3	76.6	75.4	80.0	79.0	78.4	78.8	78.5	78.6	81.0	80.9	80.6
1500	75.2	76.6	72.9	75.0	77.0	73.0	72.1	76.4	75.4	74.8	75.2	74.9	75.0	77.3	77.2	77.1
2000	71.0	73.2	68.9	71.6	73.5	69.5	68.6	72.4	71.4	70.9	71.2	70.9	70.9	73.2	73.0	72.9
2500	67.8	69.3	64.9	67.6	69.5	65.6	64.6	68.2	67.0	66.8	67.0	66.5	66.5	68.7	68.6	68.4
3150	63.2	64.7	60.2	63.1	65.1	61.1	60.0	63.8	62.6	62.4	62.5	61.8	61.4	63.6	63.6	63.4
4000	57.6	59.3	54.6	57.7	59.6	55.8	54.9	58.3	57.5	57.3	57.3	56.6	56.2	57.3	57.5	57.0
5000	51.3	53.4	48.2	52.1	53.6	50.0	49.1	52.1	51.7	51.6	51.5	50.7	50.4	50.9	51.5	51.7
6300	44.2	46.0	41.3	45.8	46.6	43.3	42.2	45.5	45.2	45.1	45.2	43.9	43.9	44.2	44.9	45.0
8000	38.5	40.7	35.1	39.9	40.6	36.8	35.9	40.0	39.0	39.4	39.9	38.7	37.7	38.7	39.4	39.1
10000	31.3	34.0	27.2	33.0	33.6	30.5	29.8	32.3	32.2	32.5	33.1	31.2	30.8	30.3	31.6	31.4
12500	23.2	26.8	17.3	24.6	24.3	21.6	19.5	23.5	22.1	23.3	23.7	20.8	20.2	21.8	21.8	21.3
15000	13.2	16.3	7.3	14.0	15.5	9.8	10.1	12.4	9.0	11.9	12.7	9.0	10.5	6.7	7.6	7.6
20000	3.3	7.1		3.4	6.8		.7	1.3		.6	1.7		.8			
25000																

TABLE1 NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-5 NOISE SUPPRESSOR
 AF32A-18
 IDENTIFICATION:
 OMEGA 8.2
 TEST 77-746-001
 RUN 02
 AIRCRAFT CODE 746
 OPERATION CODE 00104
 PROFILE VERSION A
 28 NOV 79
 PAGE J2
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB

	P=PNLT											A=AL											T=ALT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT:																			
F-5 NOISE SUPPRESSOR																			
AF32A-18																			
OPERATION:																			
AFTERBURNER POWER																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
AIRCRAFT CODE 746																			
OPERATION CODE 00103																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE C3																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
89	90	91	90	90	92	91	96	96	96	97	95	96	98	98	96	97	98	98	
91	92	94	93	95	94	94	98	96	96	98	98	99	99	99	100	99	99	99	
90	90	93	93	93	90	93	96	96	97	98	97	98	97	98	98	98	98	97	
91	91	91	91	89	92	93	98	97	98	97	98	98	96	98	96	97	97	97	
83	84	83	84	86	85	86	87	88	88	89	90	90	90	90	90	90	90	91	
160	87	89	88	90	87	84	86	87	85	87	91	91	93	94	94	93	95	94	
200	84	84	84	87	83	83	82	84	81	83	84	86	87	88	87	88	89	89	
250	81	82	80	81	80	79	80	84	85	86	85	86	84	84	84	83	85	85	
315	79	79	77	78	78	79	78	80	81	82	81	82	81	80	80	78	80	79	
400	77	79	76	77	77	78	76	80	81	83	80	79	77	77	77	76	77	76	
500	72	74	73	75	74	72	75	75	76	78	76	76	76	75	74	74	74	72	
630	71	73	70	72	73	73	71	74	74	73	76	73	74	73	73	73	72	71	
800	70	72	70	72	73	73	72	74	75	74	75	73	74	73	73	73	75	73	
1000	73	73	72	72	74	73	72	74	73	75	73	75	74	73	73	74	74	73	
1250	72	73	73	73	74	72	75	74	73	76	73	74	73	72	73	74	74	72	
1600	72	72	72	72	72	73	72	75	73	75	73	74	73	71	72	73	74	72	
2000	69	70	69	70	69	69	69	71	69	68	71	69	69	70	68	70	71	70	
2500	65	68	64	67	63	65	66	68	66	64	66	65	67	66	67	68	68	66	
3150	63	67	62	66	60	63	65	67	63	62	64	62	63	64	62	63	64	62	
4000	61	63	59	62	57	60	67	61	59	63	60	61	64	62	62	63	64	63	
5000	57	60	54	57	52	55	62	59	55	53	55	55	58	57	57	57	58	57	
6300	56	57	52	54	51	53	60	58	54	53	53	54	58	58	58	58	58	58	
8000	57	55	53	53	53	58	56	55	55	55	55	55	60	60	60	60	60	60	
10000	55	55	55	55	55	55	57	57	57	57	57	57	62	62	62	62	62	62	
OVERALL	97	98	99	99	99	99	100	103	103	103	104	104	104	104	105	105	104	105	

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT:																
F-5 NOISE SUPPRESSOR																
AF32A-18																
IDENTIFICATION:																
TEST 77-746-001																
AIRCRAFT CODE 746																
OPERATION CODE 00183																
PROFILE VERSION A																
28 NOV 79																
PAGE 63																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 3.0 DB																
ANGLE (DEGREES)																
DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
200	86.2	87.5	86.4	87.5	86.0	86.9	86.0	89.6	89.1	88.9	90.1	89.5	90.0	89.7	89.0	89.8
250	84.1	85.4	84.4	85.4	84.8	84.8	84.7	87.5	87.0	86.8	88.0	87.5	88.0	87.6	87.7	87.8
315	82.0	83.3	82.3	83.3	81.9	82.7	82.6	85.4	85.0	84.8	86.0	85.4	85.9	85.6	85.7	85.7
400	79.9	81.2	80.2	81.2	79.8	80.6	80.5	83.3	82.9	82.7	83.9	83.3	83.8	83.5	83.6	83.6
500	77.7	79.0	78.0	79.0	77.6	78.5	78.3	81.2	80.8	80.6	81.7	81.2	81.7	81.2	81.4	81.4
630	75.4	76.7	75.7	76.6	75.3	76.2	76.8	79.0	78.5	78.4	79.5	78.9	79.4	78.9	79.1	79.1
800	73.0	74.3	73.3	74.2	73.0	73.9	73.7	76.6	76.2	76.1	77.2	76.5	77.0	76.5	76.6	76.5
1000	70.5	71.8	70.8	71.7	70.6	71.5	71.2	74.1	73.8	73.6	74.8	74.0	74.5	74.0	74.1	74.1
1250	67.0	69.1	68.1	69.0	68.0	68.9	68.5	71.4	71.1	71.0	72.1	71.2	71.8	71.3	71.2	71.2
1500	65.0	66.3	65.3	66.1	65.2	66.1	65.6	68.6	68.3	68.1	69.4	68.3	68.8	68.3	68.2	68.3
2000	62.0	63.4	62.2	63.1	62.3	63.3	62.6	65.5	65.3	65.1	66.5	65.2	65.7	65.1	65.0	65.0
2500	58.6	60.1	58.9	59.7	59.1	60.0	59.2	62.1	61.9	61.7	63.1	61.6	62.2	61.6	61.4	61.5
3150	55.0	56.4	55.2	56.1	55.6	56.6	55.6	58.4	58.2	58.0	59.5	57.8	58.4	57.9	57.5	57.6
4000	50.9	52.3	51.1	52.0	51.8	52.6	51.5	54.2	54.0	53.7	55.4	53.5	54.2	53.6	53.1	53.2
5000	46.6	47.9	46.7	47.6	47.6	48.4	47.1	49.7	49.6	49.2	51.0	49.8	49.8	49.3	48.6	48.0
6300	42.0	43.2	42.1	43.0	43.3	43.8	42.5	45.0	44.9	44.6	46.4	44.3	45.2	44.7	44.8	44.2
8000	37.9	39.2	38.0	39.0	39.4	39.7	38.3	41.0	41.0	40.7	42.5	40.6	41.4	40.9	40.3	40.4
10000	33.6	34.9	33.7	34.9	35.2	35.3	34.0	36.8	37.0	36.7	38.5	36.7	37.4	37.0	36.5	36.6
12500	29.3	30.7	29.6	30.7	30.9	30.8	29.0	32.8	33.0	32.8	34.4	33.0	33.6	33.2	32.9	32.9
15000	25.0	26.4	25.5	26.6	26.6	26.3	25.7	28.9	29.0	28.9	30.4	29.3	29.8	29.5	29.4	29.3
20000	20.9	22.1	21.6	22.5	22.3	21.9	21.6	25.2	25.1	25.2	26.4	25.0	26.2	25.8	26.1	26.0
25000	16.9	18.0	18.0	18.6	18.3	17.8	18.1	21.8	21.5	21.7	22.7	22.4	22.8	22.6	22.9	22.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

F-5 NOISE SUPPRESSOR

AF32A-18

IDENTIFICATIONS:

OMEGA 8.2

TEST 77-746-881

RUN 03

AIRCRAFT CODE 746

OPERATION CODE 88103

PROFILE VERSION A

28 NOV 79

PAGE J3

METEOROLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 70 %

DELTA N = 0.0 DB

P=PNLT

A=AL

T=ALT

	10	20	30	40	50	60	70	80	90	100	110
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

[illegible]

NOISE PRODUCED ON THE GROUND BY

F-15 IN THE

DURING GROUND RUN-UP OPERATIONS

TEST 79-761-001
AIRCRAFT CODE: 761
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting

<u>Power Setting</u>	<u>Page</u>
Idle Power, 65% RPM	112-117
Engine Runup, 80% RPM	118-123
Military Power, 91% RPM	124-129
Afterburner Power	130-135

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
NORMALIZED SP. AT 0.50 THZ

NORMALIZED SPL AT 250 FEET
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
PERCEIVED NOISE LEVEL

TONE-CORRECTED, PERCEIVED NOISE LEVEL

A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AMERICAN AIR FORCE MEDICAL RESEARCH
LABORATORY, OHIO

F-15 IN THE
F-15 IN THE
F-15 IN THE
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TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)) IDENTIFICATION:		
1/3 OCTAVE BAND) OMEGA 8.2		
DISTANCE = 250 FEET																	) TEST 79-761-901		
																	) RUN 01		
NOISE SOURCE/SUBJECT:																	) METEOROLOGY:		
(F-15 IN THE																	) TEMP = 59 F		
(AF32A-23 SUPPRESSOR																	) BAR PRESS =29.92 IN HG		
(FAR-FIELD NOISE																	) REL HUMID = 70 %		
(																	) DELTA N = -3.0 DB		
BAND CENTER																	ANGLE (DEGREES)		
FREQ (HZ)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	64	62	62	62	63	60	59	59	58	57	57	56	58	63	61	62	57	57	56
63	63	63	62	60	61	61	61	61	61	61	61	62	58	65	60	60	60	58	57
80	65	63	63	61	62	61	60	59	59	58	58	57	56	62	57	59	62	57	55
100	67	64	64	67	63	63	62	62	61	61	60	60	59	60	59	64	61	58	57
125	66	63	66	64	64	61	60	60	59	58	58	57	57	57	59	67	62	56	58
160	69	66	64	66	65	62	61	60	59	58	57	55	55	55	55	64	62	55	53
200	67	64	63	60	59	58	57	57	57	56	56	56	55	55	56	60	61	55	52
250	67	64	63	63	61	61	60	59	58	56	55	54	55	56	55	55	62	56	54
315	66	62	62	60	59	60	59	58	57	56	54	53	53	52	51	53	60	51	47
400	69	67	66	67	71	69	67	65	62	60	58	56	55	55	51	55	61	52	48
500	64	67	65	63	60	65	63	62	61	59	58	57	57	58	55	56	60	49	52
630	58	59	60	58	57	55	53	52	51	50	49	48	49	47	46	44	57	44	46
800	61	61	63	62	63	62	61	60	59	58	57	56	52	53	52	49	56	44	41
1000	61	58	61	63	67	64	62	60	58	56	54	52	52	54	52	49	51	41	43
1250	57	57	58	61	59	58	57	56	55	53	52	51	53	50	52	49	46	42	43
1600	58	58	59	59	57	55	55	54	54	54	53	53	54	52	52	49	44	43	42
2000	56	57	59	57	57	56	55	54	53	52	51	50	52	50	47	41	39	39	39
2500	71	72	73	71	72	72	71	70	69	68	67	66	69	68	69	63	57	54	52
3150	68	68	68	66	66	66	65	65	64	63	63	62	64	63	65	58	52	50	48
4000	67	68	68	66	66	65	64	64	63	63	62	62	64	61	64	58	52	48	47
5000	64	64	64	62	62	61	60	60	60	59	59	59	62	58	61	54	49	45	44
6300	58	60	59	56	56	55	54	54	53	53	52	51	54	50	53	46	43	38	37
8000	55	57	56	54	54	52	51	51	51	50	50	49	51	48	49	42	39	35	34
10000	49	53	51	49	48	47	46	45	44	43	42	42	43	40	41	37	34	32	33
OVERALL	79	78	79	78	78	77	76	75	74	73	73	72	73	73	73	73	72	67	66

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-15 IN THE																			
AF32A-23 SUPPRESSOR																			
FAR-FIELD NOISE																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 79-761-001																			
RUN 01																			
AIRCRAFT CODE 761																			
OPERATION CODE 00213																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE E1																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = -3.0 DB																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.2	97.1	96.0	96.5	96.8	96.7	95.7	94.8	93.8	92.9	92.0	91.1	92.9	92.4	93.2	88.7	85.4	80.2	76.8
250	94.9	94.9	95.8	94.3	94.5	94.4	93.4	92.5	91.6	90.6	89.7	88.8	90.7	90.1	90.9	86.4	83.2	77.9	76.5
315	92.6	92.5	93.5	91.9	92.2	92.1	91.1	90.2	89.2	88.3	87.4	86.5	88.3	87.8	88.6	84.0	80.9	75.5	74.1
400	90.2	90.1	91.0	89.5	89.8	89.7	88.7	87.8	86.8	85.9	85.0	84.1	85.9	85.4	86.1	81.6	78.5	73.1	71.7
500	87.7	87.6	88.5	87.0	87.3	87.2	86.2	85.3	84.3	83.4	82.4	81.5	83.4	82.9	83.6	79.1	76.0	70.5	69.1
630	85.0	85.0	85.9	84.4	84.7	84.6	83.6	82.7	81.7	80.7	79.8	78.9	80.7	80.2	80.9	76.5	73.4	67.8	66.3
800	82.2	82.2	83.1	81.6	81.9	81.8	80.9	79.9	78.9	77.9	77.0	76.0	77.8	77.4	78.1	73.7	70.6	64.8	63.4
1000	79.3	79.2	80.2	78.7	79.0	78.9	77.9	76.9	75.9	75.0	74.0	73.0	74.8	74.4	75.1	70.6	67.6	61.7	60.2
1250	76.1	76.0	77.0	75.5	75.8	75.7	74.7	73.7	72.7	71.7	70.7	69.7	71.6	71.1	71.8	67.3	64.4	58.3	56.7
1500	72.6	72.5	73.5	72.0	72.4	72.3	71.3	70.2	69.2	68.2	67.2	66.2	68.0	67.5	68.1	63.6	60.7	54.4	52.9
2000	68.8	68.7	69.8	68.3	68.7	68.5	67.5	66.4	65.3	64.3	63.2	62.2	64.0	63.6	64.2	59.5	56.9	50.2	48.4
2500	64.4	64.3	65.5	64.0	64.4	64.3	63.2	62.1	60.9	59.8	58.7	57.6	59.4	58.9	59.6	55.0	52.2	44.4	42.6
3150	59.5	59.4	60.6	59.1	59.5	59.4	58.2	57.0	55.9	54.8	53.5	52.4	54.4	53.9	54.5	49.4	47.0	37.4	35.3
4000	53.2	53.8	54.2	52.7	53.1	53.0	51.8	50.6	49.5	48.2	46.9	45.5	47.6	47.0	47.7	43.3	39.9	28.4	26.6
5000	45.5	45.6	47.1	45.3	45.7	45.4	44.1	42.7	41.4	40.0	38.6	36.9	39.3	38.5	38.9	34.2	33.0	14.4	14.0
6300	36.7	36.6	38.2	36.7	37.7	36.6	35.2	32.5	30.9	28.9	26.9	24.7	26.5	27.5	26.9	18.7	23.4	3.8	3.8
8000	26.9	29.2	27.9	26.4	25.8	27.3	24.9	22.4	20.8	15.7	13.4	10.1	13.3	12.8	12.6	6.3	14.6	5.8	5.8
10000	17.6	20.7	17.8	16.5	21.3	19.0	15.5	9.9	7.6	2.4									
12500	8.4	11.7	8.2	7.2	11.4	9.9	6.8												
15000		2.7			1.5														
20000																			
25000																			

) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 79-761-001																			
) RUN 81																			
) AIRCRAFT CODE 761																			
) OPERATION CODE 00213																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE G1																			
) METEOROLOGY:																			
) TEMP = 59 F																			
) BAR PRESS = 29.92 IN HG																			
) REL HUMID = 70 %																			
) DELTA N = -3.0 DB																			
) ANGLE (DEGREES)																			
) DISTANCE																			
(FEET)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	82.1	82.4	83.2	84.6	82.3	82.1	81.1	80.1	79.2	78.3	77.5	76.6	75.8	74.9	73.4	71.2	64.9	63.6	
250	79.9	80.1	81.0	79.4	80.1	79.9	78.9	77.9	77.0	76.1	75.2	74.4	73.6	72.8	71.9	71.2	69.1	62.7	61.4
315	77.6	77.8	78.7	77.1	77.8	77.6	76.6	75.6	74.7	73.8	72.9	72.0	71.2	70.4	69.5	68.9	66.9	60.5	59.2
400	75.2	75.4	76.3	74.8	75.5	75.3	74.2	73.3	72.3	71.4	70.5	69.6	68.7	67.9	67.1	66.5	64.7	58.2	56.9
500	72.8	72.9	73.8	72.4	73.1	72.9	71.8	70.8	69.9	69.0	68.1	67.2	66.3	65.5	64.7	64.1	62.5	55.8	54.6
630	70.3	70.4	71.3	69.9	70.7	70.4	69.3	68.3	67.3	66.4	65.4	64.6	63.8	63.0	62.2	61.5	60.2	53.3	52.1
800	67.6	67.7	68.6	67.2	68.1	67.8	66.7	65.7	64.6	63.7	62.7	61.8	60.9	60.0	59.2	58.0	57.8	50.7	49.5
1000	64.8	64.9	65.8	64.5	65.4	65.1	63.9	62.9	61.8	60.8	59.9	58.9	58.0	57.1	56.3	55.0	53.3	48.8	46.9
1250	61.9	61.9	62.8	61.6	62.6	62.2	61.1	59.9	58.9	57.8	56.8	55.9	55.0	54.1	53.3	52.8	45.1	44.1	
1500	58.8	58.8	59.7	58.5	59.7	59.2	58.0	56.8	55.7	54.6	53.6	52.6	51.7	50.8	50.0	49.7	50.1	42.1	41.1
2000	55.6	55.5	56.3	55.3	56.7	56.1	54.8	53.6	52.4	51.3	50.2	49.1	48.1	47.2	46.3	46.3	47.4	39.8	38.1
2500	51.9	51.9	52.7	51.8	53.2	52.6	51.3	50.0	48.7	47.5	46.4	45.3	44.3	43.4	42.5	42.5	44.3	35.4	34.0
3150	47.9	47.9	48.7	47.9	49.5	48.7	47.4	46.0	44.7	43.5	42.3	41.2	40.2	39.3	38.4	38.4	40.8	31.4	30.1
4000	42.9	43.8	44.8	43.2	44.8	43.8	42.4	41.1	39.8	38.5	37.3	36.1	35.1	34.2	33.3	33.2	36.3	26.5	25.5
5000	37.6	37.7	38.5	38.1	39.8	38.6	37.2	35.8	34.4	33.1	31.9	30.7	29.7	28.8	27.9	27.6	31.3	21.2	21.5
6300	32.1	32.2	33.0	32.7	34.6	33.2	31.7	30.3	28.9	27.5	26.2	25.0	23.9	22.9	22.0	21.9	26.1	15.8	16.3
8000	27.4	27.6	28.0	27.8	29.7	28.3	26.8	25.3	23.9	22.5	21.2	19.9	19.6	19.8	18.6	17.0	21.9	11.3	12.8
10000	22.6	22.9	23.0	22.6	24.5	23.2	21.7	20.2	18.7	17.3	16.0	14.7	14.2	14.4	12.9	12.2	17.3	6.7	7.5
12500	18.2	18.6	18.4	17.9	19.6	18.6	17.0	15.5	14.1	12.7	11.3	10.0	9.5	9.8	7.9	7.9	13.1	2.6	3.3
16000	13.5	14.0	13.5	12.7	14.3	13.6	12.0	10.5	9.0	7.6	6.2	4.9	4.5	4.8	2.8	3.5	8.4		
20000	8.5	8.8	8.1	7.2	8.7	8.2	6.6	5.1	3.6	2.2	.8						3.3		
25000	3.1	3.2	2.2	1.4	2.8	2.4	.8												

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: (OPERATIONS:) METEOROLOGY:) AIRCRAFT CODE 761																			
F-15 IN THE (80% RPM) TEMP = 59 F) OPERATION CODE 00219																			
AF32A-23 SUPPRESSOR (SINGLE ENGINE) BAR PRESS =29.92 IN HG) PROFILE VERSION A																			
FAR-FIELD NOISE (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) 28 NOV 79																			
(DELTA N = -3.0 DB)) PAGE E2																			
IDENTIFICATION:) OMEGA 8.2																			
TEST 79-761-001																			
RUN 82																			
ANGLE (DEGREES)																			
(DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
((FEET)																			
(200	96.3	97.6	102.5	100.9	100.7	99.7	98.3	96.9	95.0	93.8	92.4	91.1	89.7	88.8	88.1	86.6	84.6	84.6	84.5
(250	94.0	95.3	100.2	98.6	98.4	97.4	96.0	94.6	92.7	91.4	90.1	88.8	87.4	86.5	85.8	84.2	82.2	82.2	82.2
(315	91.6	92.9	97.8	96.3	96.0	95.0	93.6	92.2	90.3	89.0	87.7	86.4	85.0	84.1	83.4	81.8	79.8	79.9	79.8
(400	89.2	90.4	95.3	93.8	93.5	92.5	91.1	89.7	87.8	86.5	85.2	83.9	82.5	81.6	81.0	79.3	77.4	77.4	77.4
(500	86.6	87.9	92.7	91.1	90.9	89.9	88.5	87.1	85.2	83.9	82.6	81.3	80.0	79.0	78.5	76.8	74.9	74.9	74.8
(630	84.0	85.2	89.9	88.4	88.1	87.1	85.7	84.3	82.4	81.1	79.8	78.5	77.3	76.3	75.7	74.1	72.1	72.1	72.8
(800	81.2	82.3	86.9	85.5	85.2	84.2	82.8	81.4	79.5	78.2	77.0	75.7	74.5	73.5	72.9	71.2	69.2	69.2	69.1
(1000	78.3	79.3	83.7	82.4	82.0	81.1	79.7	78.4	76.5	75.2	73.9	72.7	71.6	70.6	70.0	68.1	66.1	66.0	65.9
(1250	75.5	76.0	80.4	79.2	78.8	77.8	76.4	75.1	73.2	71.9	70.7	69.4	68.4	67.5	66.8	64.9	62.8	62.6	62.5
(1600	72.4	72.6	76.8	75.9	75.4	74.4	73.0	71.6	69.8	68.5	67.1	65.9	65.0	64.2	63.4	61.5	59.3	58.7	58.5
(2000	69.2	68.9	73.8	72.3	71.7	70.6	69.2	67.9	66.0	64.7	63.4	62.1	61.6	60.6	59.7	57.5	55.1	54.8	53.9
(2500	65.1	64.9	69.8	68.3	67.5	66.5	65.1	63.7	61.8	60.6	59.3	58.0	57.3	56.4	55.4	52.7	50.3	48.6	48.2
(3150	60.5	60.3	64.5	63.0	63.0	62.2	60.8	59.4	57.5	56.1	54.8	53.4	52.5	51.4	50.2	47.8	45.1	43.1	41.8
(4000	55.4	55.4	59.3	58.2	58.3	57.5	56.0	54.5	52.6	50.9	49.3	47.8	46.8	45.6	44.6	41.7	39.8	36.4	34.8
(5000	49.6	49.8	53.9	52.8	52.8	52.0	50.3	48.7	46.7	44.8	43.2	41.7	40.5	39.3	38.6	34.4	31.0	26.8	23.4
(6300	43.4	43.6	47.8	46.0	46.6	45.6	44.0	42.2	40.3	38.4	36.8	34.9	33.4	32.5	31.4	25.9	21.8	16.6	12.7
(8000	37.5	37.9	42.2	42.3	40.9	40.1	38.4	36.5	34.3	32.2	30.5	28.1	26.1	24.8	22.3	16.6	10.3	6.4	2.1
(10000	31.3	31.3	36.1	36.2	34.5	33.8	31.6	29.4	27.3	24.5	22.3	19.4	16.3	14.1	11.2	7.3			
(12500	22.7	22.8	28.5	29.1	27.3	26.4	24.8	21.1	18.7	15.5	12.1	8.2	6.6	3.5	.0				
(16000	13.9	11.6	19.4	19.4	18.4	16.6	13.1	10.9	6.8	6.6	1.9								
(20000	5.1	.4	10.2	9.8	9.6	6.7	2.1	.7											
(25000			1.0	.1	.8														

TABLE 1 A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
DISTANCE (FEET)	ANGLE (DEGREES)										IDENTIFICATION:								
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	81.4	82.8	86.6	85.6	85.1	84.0	82.7	81.4	80.1	78.8	77.6	76.3	74.8	74.4	73.6	71.6	69.5	68.6	68.7
250	79.3	80.6	84.4	83.4	82.9	81.8	80.5	79.2	77.9	76.6	75.4	74.2	72.7	72.2	71.5	69.5	67.4	66.5	66.6
315	77.1	78.3	82.1	81.2	80.6	79.6	78.2	77.0	75.7	74.4	73.2	72.0	70.5	70.1	69.3	67.3	65.3	64.4	64.5
400	74.9	76.1	79.7	78.9	78.3	77.2	75.9	74.7	73.4	72.1	70.9	69.7	68.3	67.9	67.1	65.1	63.1	62.3	62.4
500	72.7	73.7	77.3	76.5	76.0	74.9	73.6	72.3	71.0	69.8	68.6	67.4	66.0	65.6	64.8	62.8	60.9	60.0	60.2
630	70.3	71.3	74.8	74.1	73.5	72.4	71.1	69.9	68.6	67.4	66.2	65.0	63.7	63.2	62.5	60.4	58.5	57.7	57.7
800	67.9	68.8	72.3	71.7	71.0	69.9	68.6	67.4	66.1	64.9	63.7	62.5	61.2	60.8	60.0	58.0	56.1	55.2	55.2
1000	65.5	66.2	69.6	69.1	68.4	67.3	66.0	64.8	63.5	62.3	61.1	59.9	58.7	58.3	57.5	55.4	53.5	52.6	52.5
1250	62.9	63.5	66.8	66.4	65.8	64.6	63.3	62.1	60.8	59.6	58.4	57.2	56.0	55.6	54.8	52.7	50.8	49.8	49.6
1600	60.2	60.7	64.0	63.7	63.0	61.8	60.5	59.3	58.1	56.8	55.6	54.4	53.2	52.8	52.0	49.9	48.0	46.8	46.5
2000	57.5	57.8	61.0	60.8	60.1	59.0	57.7	56.5	55.2	54.0	52.7	51.5	50.3	49.9	49.1	46.9	45.0	43.6	43.1
2500	54.4	54.7	57.9	57.8	57.0	55.9	54.6	53.3	52.1	50.9	49.6	48.4	47.1	46.8	45.9	43.7	41.7	40.2	39.4
3150	51.0	51.3	54.4	54.5	53.6	52.5	51.2	50.0	48.7	47.5	46.3	45.0	43.7	43.5	42.6	40.3	38.3	36.5	35.4
4000	47.3	47.5	50.7	50.8	49.9	48.8	47.6	46.3	45.0	43.8	42.6	41.3	39.9	39.8	38.9	36.6	34.6	32.6	31.1
5000	43.1	43.4	46.6	46.8	45.8	44.7	43.4	42.2	40.9	39.7	38.5	37.3	35.8	35.7	34.9	32.5	30.5	28.4	26.8
6300	38.7	39.0	42.1	42.4	41.4	40.3	39.0	37.8	36.5	35.3	34.1	32.9	31.3	31.3	30.5	28.1	26.2	24.0	22.3
8000	34.7	34.9	38.0	38.3	37.4	36.4	35.1	33.8	32.5	31.3	30.1	28.8	27.4	27.2	26.4	24.1	22.2	20.2	18.7
10000	30.5	30.6	33.6	33.9	33.0	32.1	30.8	29.5	28.2	27.0	25.7	24.5	23.2	22.8	22.0	19.8	18.0	16.1	15.1
12500	25.9	25.9	28.8	29.1	28.3	27.5	26.2	24.9	23.6	22.4	21.1	19.9	18.7	18.1	17.3	15.3	13.5	12.0	11.4
16000	21.0	20.9	23.7	23.9	23.1	22.5	21.2	19.9	18.6	17.3	16.1	14.9	13.9	13.2	12.4	10.6	9.0	8.0	7.9
20000	15.7	15.6	18.3	18.3	17.6	17.0	15.7	14.5	13.2	12.0	10.8	9.6	8.9	8.1	7.3	5.9	4.6	4.3	4.5
25000	10.1	10.1	12.5	12.3	11.8	11.2	9.9	8.8	7.5	6.4	5.3	4.2	3.7	2.6	2.5	1.5	.5	.8	1.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
(OPERATION:)																			
(882 RPM)																			
(SINGLE ENGINE)																			
(GROUND RUNUP (SUPPRESSED))																			
()																			
FAR-FIELD NOISE																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = -3.8 DB																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.0	82.8	87.3	86.2	85.7	84.7	83.3	82.0	80.1	78.8	77.6	76.3	75.3	74.4	73.6	71.6	69.5	68.6	68.7
250	79.8	80.6	85.0	84.0	83.5	82.5	81.1	79.6	77.9	76.6	75.4	74.2	73.2	72.2	71.5	69.5	67.4	66.5	66.6
315	77.7	78.3	82.7	81.8	81.2	80.2	78.9	77.5	75.7	74.4	73.2	72.0	71.0	70.1	69.3	67.3	65.3	64.4	64.5
400	75.5	76.1	80.4	79.5	79.0	78.0	76.6	75.2	73.4	72.1	70.9	69.7	68.8	67.9	67.1	65.1	63.1	62.3	62.4
500	73.2	73.7	78.0	77.2	76.6	75.6	74.2	72.9	71.0	69.8	68.6	67.4	66.6	65.6	64.8	62.8	60.9	60.8	60.2
630	70.9	71.3	75.5	74.8	74.2	73.1	71.7	70.4	68.6	67.4	66.2	65.0	64.2	63.2	62.5	60.4	58.5	57.7	57.2
800	68.5	68.8	72.9	72.3	71.6	70.6	69.2	67.9	66.1	64.9	63.7	62.5	61.7	60.8	60.0	58.0	56.1	55.2	55.2
1000	66.0	66.2	70.2	69.7	69.1	68.0	66.6	65.3	63.5	62.3	61.1	59.9	59.2	58.3	57.5	55.4	53.5	52.6	52.5
1250	63.4	63.5	67.5	67.1	66.4	65.3	63.9	62.6	60.8	59.6	58.4	57.2	56.5	55.6	54.8	52.7	50.8	49.8	49.6
1500	60.8	60.8	64.6	64.3	63.6	62.5	61.2	59.9	58.1	56.8	55.6	54.4	53.7	52.8	52.0	49.9	48.0	46.8	46.5
2000	58.8	57.8	61.7	61.5	60.7	59.6	58.3	57.0	55.2	54.0	52.7	51.5	50.8	49.9	49.1	46.9	45.0	43.6	43.1
2500	54.9	54.7	58.5	58.4	57.6	56.5	55.2	53.9	52.1	50.9	49.6	48.4	47.7	46.8	45.9	43.7	41.7	40.2	39.4
3150	51.5	51.3	55.1	55.1	54.2	53.2	51.9	50.6	48.7	47.5	46.3	45.0	44.2	43.5	42.6	40.3	38.3	36.5	35.4
4000	47.7	47.5	51.2	51.3	50.4	49.4	48.0	46.6	44.7	43.8	42.6	41.3	40.3	39.8	38.9	36.6	34.6	32.6	31.1
5000	43.4	43.4	46.9	47.2	46.2	45.1	43.8	42.5	40.9	39.7	38.5	37.3	36.1	35.7	34.9	32.5	30.5	28.4	26.8
6000	38.9	38.0	42.4	42.6	41.7	40.6	39.3	38.0	36.5	35.3	34.1	32.9	31.5	31.3	30.5	28.1	26.2	24.8	23.3
8000	34.8	34.9	38.1	38.5	37.5	36.5	35.2	33.9	32.5	31.3	30.1	28.8	27.5	27.2	26.4	24.1	22.2	20.2	18.7
10000	30.5	30.6	33.6	33.9	33.0	32.1	30.8	29.5	28.2	27.0	25.7	24.5	23.2	22.8	22.0	19.8	18.0	16.1	15.1
12500	25.9	25.9	28.8	29.1	28.3	27.5	26.2	24.9	23.6	22.4	21.1	19.9	18.7	18.1	17.3	15.3	13.5	12.0	11.4
15000	21.0	20.9	23.7	23.9	23.1	22.5	21.2	19.9	18.6	17.3	16.1	14.9	13.9	13.2	12.4	10.6	9.8	8.8	7.9
20000	15.7	15.6	18.3	18.3	17.6	17.0	15.7	14.5	13.2	12.0	10.8	9.6	8.9	8.8	7.3	5.9	4.6	4.3	4.5
25000	10.1	10.1	12.5	12.3	11.8	11.2	9.9	8.8	7.5	6.4	5.3	4.2	3.7	2.8	2.5	1.5	.5	.8	1.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-15 IN THE
 AF32A-23 SUPPRESSOR
 FAR-FIELD NOISE
 IDENTIFICATION:
 OMEGA 8-2
 TEST 79-761-001
 RUN 02
 AIRCRAFT CODE 761
 OPERATION CODE 00219
 PROFILE VERSION A
 28 NOV 79
 PAGE J2

	P=PNLT										T=ALT													
	10	20	30	40	50	60	70	80	90	100	110		10	20	30	40	50	60	70	80	90	100	110	
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TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT:																			
(F-15 IN THE)																			
(AF32A-23 SUPPRESSOR)																			
(FAR-FIELD NOISE)																			
(OPERATION: MILITARY POWER (91% RPM) = 59 F)																			
(SINGLE ENGINE BAR PRESS = 29.92 IN HG)																			
(GROUND RUNUP (SUPPRESSED) REL HUMID = 70 %)																			
(DELTA N = -3.0 DB)																			
METEOROLOGY:)																			
AIRCRAFT CODE 761)																			
OPERATION CODE 00204)																			
PROFILE VERSION A)																			
28 NOV 79)																			
PAGE C3)																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190
50	81	82	83	82	81	79	79	78	78	77	77	76	79	80	80	81	82	84	84
63	84	83	83	81	79	77	77	77	77	77	77	76	76	78	80	80	80	81	81
80	79	79	79	80	79	78	78	77	77	76	76	76	77	77	80	80	81	83	83
100	78	79	79	78	77	77	77	77	77	77	77	79	77	77	78	80	81	81	81
125	83	86	83	82	83	83	82	82	81	80	80	82	81	81	79	81	81	81	81
160	82	86	82	83	84	83	82	82	81	81	81	81	80	81	79	81	81	81	81
200	83	85	83	81	82	83	82	82	81	80	79	81	77	78	77	77	77	77	78
250	82	81	81	83	82	81	81	80	79	78	77	78	75	75	76	73	73	77	77
315	82	81	83	83	83	82	81	80	79	78	77	78	73	73	72	70	70	70	70
400	85	82	85	84	85	83	82	80	79	77	76	73	73	71	69	68	66	66	66
500	84	84	86	85	86	83	81	80	78	77	75	73	73	71	71	69	66	66	66
630	85	84	86	88	87	85	83	81	79	77	75	73	72	71	72	70	67	65	65
800	83	83	85	88	86	83	81	80	78	76	74	73	72	71	72	73	71	69	66
1000	81	81	84	88	85	83	81	79	77	75	73	71	69	69	70	71	68	66	63
1250	81	81	85	84	84	80	78	76	74	73	71	69	68	68	67	68	66	64	63
1600	80	81	86	86	82	80	78	76	74	72	70	68	67	67	67	67	66	64	64
2000	79	82	85	85	84	79	77	76	74	72	70	68	66	66	66	66	64	63	64
2500	79	81	83	84	82	79	77	75	73	70	68	66	64	65	65	64	62	62	63
3150	79	80	85	84	82	80	78	76	74	72	69	67	63	66	64	65	63	64	64
4000	79	81	86	85	84	81	79	76	74	72	70	68	65	66	66	67	65	65	64
5000	76	78	85	82	80	78	76	73	71	69	67	65	62	63	62	64	62	62	62
6300	74	76	83	80	79	76	73	71	69	66	64	62	59	59	59	59	58	58	57
8000	72	74	80	78	76	73	70	67	65	62	60	57	56	57	56	56	54	56	54
10000	70	71	77	76	74	70	67	64	61	58	55	52	52	53	52	52	51	51	51
OVERALL	95	96	98	98	97	95	93	92	91	90	89	88	89	88	88	89	89	89	90

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:										IDENTIFICATION:									
(F-15 IN THE)										(OMEGA 0.2)									
(AF32A-23 SUPPRESSOR)										(TEST 79-761-081)									
(FAR-FIELD NOISE)										(RUN 03)									
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TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-15 IN THE																			
AF32A-23 SUPPRESSOR																			
FAR-FIELD NOISE																			
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.9	95.4	98.5	98.5	96.9	94.4	92.5	90.6	88.8	87.0	85.3	83.7	82.9	82.1	81.9	82.2	80.5	79.4	79.3
250	91.7	93.2	96.2	96.3	94.8	92.2	90.3	88.4	86.6	84.9	83.2	81.5	80.8	80.0	79.8	80.1	78.4	77.2	77.2
315	89.6	91.0	93.9	94.1	92.5	90.0	88.1	86.3	84.4	82.7	81.0	79.4	78.7	77.9	77.7	77.9	76.3	75.1	75.0
400	87.3	88.7	91.6	91.9	90.3	87.7	85.9	84.0	82.2	80.5	78.8	77.2	76.6	75.7	75.5	75.7	74.1	72.9	72.8
500	85.1	86.4	89.2	89.5	88.0	85.4	83.6	81.8	80.0	78.3	76.6	75.0	74.4	73.4	73.2	73.5	71.9	70.6	70.5
630	82.7	84.0	86.8	87.2	85.6	83.1	81.2	79.4	77.6	75.9	74.3	72.7	72.1	71.1	70.9	71.2	69.5	68.2	68.1
800	80.4	81.6	84.2	84.7	83.2	80.7	78.8	77.0	75.3	73.6	71.9	70.3	69.7	68.7	68.5	68.8	67.1	65.8	65.6
1000	77.9	79.1	81.6	82.2	80.7	78.2	76.4	74.6	72.8	71.1	69.5	67.9	67.3	66.3	66.1	66.4	64.6	63.2	63.0
1250	75.4	76.6	79.1	79.6	78.2	75.6	73.8	72.0	70.2	68.6	66.9	65.3	64.6	63.7	63.5	63.8	62.0	60.5	60.2
1600	72.8	73.8	76.1	76.9	75.5	73.0	71.2	69.4	67.6	65.9	64.2	62.6	61.9	61.1	60.8	61.2	59.3	57.7	57.2
2000	70.1	71.0	73.3	74.1	72.8	70.2	68.4	66.6	64.9	63.2	61.5	59.9	59.0	58.3	58.0	58.4	56.5	54.7	54.1
2500	67.2	68.0	70.2	71.2	69.8	67.3	65.5	63.7	61.9	60.2	58.5	56.8	55.9	55.3	55.0	55.5	53.5	51.6	50.8
3150	64.8	64.7	66.9	68.0	66.7	64.1	62.3	60.5	58.7	56.9	55.2	53.5	52.5	52.1	51.7	52.3	50.3	48.2	47.2
4000	60.4	61.0	63.2	64.5	63.1	60.6	58.7	56.9	55.1	53.3	51.5	49.8	48.8	48.4	48.1	48.8	46.7	44.5	43.3
5000	56.3	56.8	59.1	60.6	59.1	56.5	54.7	52.9	51.0	49.3	47.5	45.7	44.7	44.4	44.0	44.9	42.8	40.5	39.1
6300	51.9	52.3	54.7	56.3	54.8	52.2	50.4	48.6	46.7	44.9	43.1	41.4	40.3	40.0	39.8	40.6	38.5	36.2	34.6
8000	48.8	48.2	50.5	52.1	50.8	48.2	46.4	44.6	42.8	41.0	39.2	37.5	36.5	36.2	35.9	36.7	34.5	32.2	30.8
10000	43.7	43.7	46.1	47.6	46.4	43.9	42.1	40.3	38.5	36.8	35.0	33.3	32.4	32.0	31.7	32.3	30.3	28.0	26.7
12500	39.1	39.0	41.2	42.6	41.6	39.1	37.3	35.6	33.8	32.1	30.4	28.8	27.9	27.5	27.0	27.6	25.6	23.5	22.5
16000	34.8	33.8	35.9	37.1	36.3	33.9	32.1	30.4	28.7	27.1	25.4	23.8	23.1	22.5	22.0	22.4	20.6	18.7	18.1
20000	28.3	28.1	30.1	31.8	30.4	28.1	26.4	24.7	23.1	21.6	20.0	18.5	18.1	17.2	16.7	16.9	15.3	13.8	13.8
25000	22.1	21.9	23.8	24.3	24.0	21.7	20.1	18.6	17.1	15.6	14.2	12.9	12.8	11.6	11.2	11.2	10.1	9.2	9.7

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (NOISE SOURCE/SUBJECT:
 (F-15 IN THE
 (AF32A-23 SUPPRESSOR
 (FAR-FIELD NOISE
 (IDENTIFICATIONS:
 (OMEGA 8.2
 (TEST 79-761-001
 (RUN 03
 (AIRCRAFT CODE 761
 (OPERATION CODE 06204
 (PROFILE VERSION A
 (26 NOV 79
 (PAGE J3
 (

	P=PNLT											T=ALT			
	A=AL														
	20	30	40	50	60	70	80	90	100	110	120				
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A N G L E
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TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-15 IN THE
 AF32A-23 SUPPRESSOR
 FAR-FIELD NOISE
 IDENTIFICATION:
 OMEGA 8.2
 TEST 79-761-001
 RUN 04
 AIRCRAFT CODE 761
 OPERATION CODE 00101
 PROFILE VERSION A
 28 NOV 79
 PAGE J4
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 P=PNLT
 A=AL
 T=ALT

	20	30	40	50	60	70	80	90	100	110	120
0
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90
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120
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140
150
160
170
180

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																		
NOISE SOURCE/SUBJECT:																		
(F-16 AIRCRAFT IN THE)																		
(AF32A-25 SUPPRESSOR)																		
(FAR-FIELD NOISE)																		
(OPERATION:)																		
(IDLE POWER (65% RPM))																		
(65 % M2 850 LBS/HR)																		
(440 FTIT)																		
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TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																				
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																				
NOISE SOURCE/SUBJECT:											IDENTIFICATIONS:									
(F-16 AIRCRAFT IN THE)) OMEGA 8.2									
(AF32A-25 SUPPRESSOR)) TEST 79-738-001									
(FAR-FIELD NOISE)) RUN 01									
(OPERATIONS:) METEOROLOGY:									
(IDLE POWER (65% RPM))) TEMP = 59 F									
(65 % N2 850 LBS/HR)) BAR PRESS = 29.92 IN HG									
(440 FTIT)) REL HUMID = 70 %									
()) DELTA N = 0.0 DB									
()) AIRCRAFT CODE 738									
()) OPERATION CODE 00113									
()) PROFILE VERSION A									
()) 28 NOV 79									
()) PAGE F1									
DISTANCE																				
ANGLE (DEGREES)																				
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	79.0	82.3	83.7	81.9	79.1	76.6	73.7	76.2	79.3	69.0	64.6	64.1	65.0	62.2	59.8	60.5	63.5	58.7	60.2	
250	76.0	80.0	81.4	79.6	76.8	74.4	71.5	73.9	76.8	66.8	62.4	61.9	62.9	60.0	57.6	58.4	61.3	56.6	58.0	
315	74.5	77.6	79.1	77.4	74.6	72.1	69.2	71.6	74.5	64.6	60.2	59.6	60.6	57.8	55.4	56.3	59.1	54.4	55.9	
400	72.1	75.1	76.8	75.0	72.2	69.8	66.9	69.3	72.1	62.3	57.9	57.3	58.3	55.5	53.2	54.1	56.9	52.2	53.8	
500	69.7	72.6	74.3	72.5	69.8	67.4	64.5	66.8	69.7	59.9	55.6	54.9	56.0	53.2	50.9	51.9	54.6	50.0	51.6	
630	67.1	70.0	71.8	70.0	67.3	64.9	61.9	64.2	67.1	57.4	53.1	52.4	53.5	50.7	48.5	49.6	52.2	47.7	49.3	
800	64.4	67.2	69.2	67.3	64.6	62.3	59.3	61.5	64.4	54.8	50.6	49.8	51.0	48.2	46.0	47.2	49.7	45.3	47.0	
1000	61.7	64.3	66.4	64.5	61.8	59.6	56.5	58.6	61.5	52.1	47.9	47.0	48.3	45.5	43.4	44.6	47.1	42.8	44.5	
1250	58.7	61.2	63.6	61.5	58.9	56.7	53.6	55.5	58.4	49.2	45.1	44.1	45.5	42.6	40.6	41.9	44.3	40.1	41.7	
1600	55.5	57.9	60.6	58.3	55.7	53.7	50.5	52.1	55.1	46.2	42.1	40.9	42.5	39.5	37.7	39.0	41.3	37.3	38.8	
2000	52.2	54.4	57.4	54.9	52.4	50.5	47.2	48.5	51.4	43.0	39.0	37.5	39.3	36.2	34.6	36.1	38.2	34.4	35.7	
2500	48.6	50.7	54.1	51.2	48.8	47.2	43.6	44.5	47.4	39.6	35.6	33.8	36.0	32.7	31.2	32.9	34.9	31.3	32.2	
3150	44.8	46.7	50.7	47.4	45.1	43.7	39.9	40.1	43.0	36.0	32.1	29.9	32.4	28.9	27.7	29.5	31.3	27.9	28.5	
4000	40.7	42.4	46.8	43.0	40.9	39.8	35.8	35.2	38.1	32.0	28.1	25.5	28.5	24.0	23.8	25.8	27.4	24.2	24.4	
5000	36.1	37.7	42.5	38.3	36.3	35.3	31.3	29.9	32.0	27.6	23.8	20.9	24.3	20.5	19.7	21.8	23.2	20.2	20.1	
6300	31.3	32.8	37.9	33.3	31.5	30.7	26.6	24.3	26.8	23.1	19.3	16.0	19.0	15.9	15.3	17.5	18.8	15.9	15.7	
8000	27.1	28.3	33.9	29.0	27.2	26.7	22.3	19.1	21.4	19.3	15.3	12.0	15.7	12.0	11.4	13.6	14.7	12.0	12.1	
10000	22.7	23.6	29.6	24.7	22.8	22.5	17.7	14.3	16.3	15.4	11.1	7.9	11.4	7.9	7.2	9.4	10.5	7.8	8.4	
12500	18.0	18.7	25.0	20.0	18.1	17.9	12.9	9.4	11.3	11.2	6.7	3.7	6.7	3.6	2.8	5.0	6.0	3.3	4.6	
16000	12.8	13.3	19.8	14.9	12.9	12.9	7.7	4.4	6.1	6.6	2.1	1.7	1.7	1.3	1.3	1.3	1.3	1.3	1.3	
20000	7.2	7.5	14.0	9.2	7.2	7.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
25000	1.0	1.2	7.3	2.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	

TABLE 1 NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

IDENTIFICATION:
 OMEGA 6.2
 TEST 79-738-001
 RUN 01
 AIRCRAFT CODE 738
 OPERATION CODE 88113
 PROFILE VERSION A
 28 NOV 79
 PAGE J1

NOISE SOURCE/SUBJECT:
 F-16 AIRCRAFT IN THE
 AF32A-25 SUPPRESSOR
 FAR-FIELD NOISE

OPERATION:
 IDLE POWER (65% RPM)
 65% N2
 440 FTIT

METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB

P=PNLT T=ALT

	0	10	20	30	40	50	60	70	80	90	100
0											
10											
20											
30											
40											
50											
60											
70											
80											
90											
100											
110											
120											
130											
140											
150											
160											
170											
180											

NOISE LEVEL IN PND3 OR DBA

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-16 AIRCRAFT IN THE
 AF32A-25 SUPPRESSOR
 FAR-FIELD NOISE
 IDENTIFICATION:
 OMEGA 8.2
 TEST 79-738-001
 RUN 82
 METEOROLOGY:
 TEMPERATURE = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 AIRCRAFT CODE 738
 OPERATION CODE 80119
 PROFILE VERSION A
 20 NOV 79
 PAGE J2

	P=PNLT										A=AL										T=ALT									
	0	10	20	30	40	50	60	70	80	90	100	0	10	20	30	40	50	60	70	80	90	100								
0	(.	(.							
10	(.	(.	AT	.	.							
20	(.	(.	AT	.							
30	(.	(.	AT	.	.							
40	(.	(.	AT	.	.							
50	(.	(.	P	.							
60	(.	(.	AT	.	.							
70	(.	(.	P	.							
80	(.	(.	AT	.	.							
90	(.	(.	AT	.	.							
100	(.	(.	P	.							
110	(.	(.	AT	.	.							
120	(.	(.	P	.							
130	(.	(.	AT	.	.							
140	(.	(.	P	.							
150	(.	(.	X	.	.							
160	(.	(.	P	.							
170	(.	(.	AT	.	.							
180	(.	(.	X	.	.							

ANGLE

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-16 AIRCRAFT IN THE
 AF32A-25 SUPPRESSOR
 FAR-FIELD NOISE
 IDENTIFICATION:
 OMEGA 8.2
 TEST 79-738-001
 RUN 03
 AIRCRAFT CODE 738
 OPERATION CODE 80104
 PROFILE VERSION A
 28 NOV 79
 PAGE J3
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 P=PNLT
 A=AL
 T=ALT

	10	20	30	40	50	60	70	80	90	100	110
9
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

F-16 AIRCRAFT IN THE

AF32A-25 SUPPRESSOR

FAR-FIELD NOISE

OPERATION:

AFTERBURNER POWER

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 70 %

DELTA N = 0.0 DB

IDENTIFICATION:

OMEGA 8.2

TEST 79-736-001

RUN 04

AIRCRAFT CODE 736

OPERATION CODE 00103

PROFILE VERSION A

28 NOV 79

PAGE J4

ANGLE IN DEGREES	NOISE LEVEL IN PNDB OR DBA										
	10	20	30	40	50	60	70	80	90	100	110
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 ((DISTANCE = 250 FEET
 ((NOISE SOURCE/SUBJECT:
 ((F-106 NOISE SUPPRESSOR
 ((AF32A-16
 (((OPERATIONS:
 (((IDLE POWER 53% RPM
 (((SINGLE ENGINE
 (((GROUND RUNUP (SUPPRESSED)
 (((METEOROLOGY:
 (((TEMP = 59 F
 (((BAR PRESS = 29.92 IN HG
 (((REL HUMID = 70 %
 (((DELTA N = 0.0 DB
 (((IDENTIFICATION:
 (((OMEGA 8.2
 (((TEST 77-730-C91
 (((RUN 91
 (((AIRCRAFT CODE 730
 (((OPERATION CODE 90113
 (((PROFILE VERSION A
 (((28 NOV 79
 (((PAGE J1
 (((

ANGLE	NOISE LEVEL IN PND8 OR DBA										T=ALT	
	P=PMLT A=AL											
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-100 NOISE SUPPRESSOR
 AF32A-16
 IDENTIFICATION:
 OMEGA 8.2
 TEST 77-730-001
 RUN 02
 AIRCRAFT CODE 730
 OPERATION CODE 00121
 PROFILE VERSION A
 28 NOV 79
 PAGE J2
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 P=PNT
 A=AL
 T=ALT

	0	10	20	30	40	50	60	70	80	90	100
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

TABLE:	PERCEIVED NOISE LEVEL (PNDB)	IDENTIFICATIONS:																		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE) OMEGA 8.2																		
) TEST 77-730-001																		
) RUN 03																		
NOISE SOURCE/SUBJECT:) METEOROLOGY:																		
F-100 NOISE SUPPRESSOR) TEMP = 59 F																		
AF32A-16) MILITARY POWER 97% RPM																		
) SINGLE ENGINE																		
) BAR PRESS = 29.92 IN HG																		
) GROUND RUNUP (SUPPRESSED)																		
) REL HUMID = 70 %																		
) DELTA N = 0.0 DB																		
) PAGE 03																		
DISTANCE		ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	107.0	105.6	109.6	106.9	108.5	109.9	108.3	107.8	110.5	111.5	113.6	114.7	115.0	112.2	106.5	105.6	104.3	104.0	101.2	
250	104.9	103.4	107.4	104.7	106.3	107.7	106.0	105.5	108.2	109.1	111.3	112.4	112.7	109.9	104.2	103.3	102.1	101.8	98.9	
315	102.8	101.2	105.1	102.4	103.9	105.5	103.6	103.1	105.8	106.7	108.9	110.0	110.2	107.6	101.8	101.0	99.8	99.5	96.7	
400	100.6	99.0	102.8	100.1	101.5	103.2	101.2	100.7	103.3	104.2	106.4	107.4	107.7	105.2	99.4	98.6	97.5	97.2	94.3	
500	98.4	96.7	100.5	97.6	99.1	100.8	98.6	98.1	100.6	101.6	103.9	104.8	105.0	102.6	96.8	96.1	95.0	94.8	91.9	
630	96.1	94.3	98.1	95.0	96.5	98.3	95.9	95.4	97.8	98.8	101.2	102.0	102.2	100.0	94.2	93.5	92.4	92.3	89.3	
800	93.7	91.9	95.5	92.3	93.8	95.7	93.3	92.6	94.9	96.0	98.4	99.1	99.2	97.2	91.4	90.8	89.8	89.7	85.6	
1000	91.3	89.3	92.9	89.5	90.9	92.9	90.5	89.9	91.9	93.0	95.5	96.0	95.9	94.3	88.5	87.9	86.9	87.0	84.0	
1250	88.7	86.6	90.1	86.4	87.9	90.0	87.6	87.1	88.7	89.9	92.3	92.7	92.6	91.2	85.4	84.8	83.9	84.1	81.2	
1600	86.1	83.8	87.2	83.1	84.7	86.9	84.5	84.0	85.3	86.4	88.8	89.1	88.9	87.8	82.1	81.4	80.8	81.2	78.2	
2000	83.3	80.8	84.1	79.6	81.6	83.7	81.4	80.9	81.8	83.0	85.1	85.3	85.1	84.1	78.6	78.0	77.4	78.0	75.0	
2500	79.5	77.0	80.3	75.8	77.7	80.0	77.8	77.4	78.0	79.2	80.9	81.4	80.9	80.0	74.9	74.1	73.6	74.6	71.2	
3150	75.3	72.7	76.0	71.5	73.6	76.0	74.0	73.7	73.8	75.0	76.4	77.0	76.2	75.5	70.9	70.1	69.4	70.7	66.9	
4000	70.5	67.9	71.8	67.1	69.0	71.6	69.8	69.6	69.1	70.3	71.5	72.0	70.9	70.3	66.6	65.6	64.8	66.6	62.5	
5000	65.1	62.7	67.2	62.3	64.2	66.9	65.2	65.1	64.0	65.3	66.1	66.6	65.2	65.0	61.9	60.8	60.0	62.0	57.7	
6300	59.5	57.7	62.2	57.2	59.0	61.9	60.2	60.0	58.3	59.4	60.0	60.5	59.1	59.4	56.5	55.5	54.8	56.9	52.3	
8000	55.8	53.3	57.7	52.3	54.4	57.3	55.6	55.5	53.1	54.2	54.6	54.4	53.7	54.5	51.8	50.5	49.9	52.0	47.0	
10000	51.7	48.6	52.3	46.3	49.6	52.2	50.5	50.4	47.4	48.7	49.0	48.7	47.7	48.9	46.4	44.7	43.6	46.6	41.4	
12500	47.4	43.5	46.3	40.3	43.7	46.9	44.9	44.2	40.8	41.8	42.2	42.4	40.9	42.4	39.8	38.1	37.4	40.3	34.6	
16000	42.5	37.7	40.4	33.5	37.4	40.8	38.6	37.1	33.3	34.4	34.4	35.5	33.4	35.4	32.8	30.5	29.3	32.8	27.6	
20000	36.1	31.3	33.8	25.6	30.4	33.5	31.7	28.3	24.8	24.8	27.8	24.0	27.3	24.0	20.4	18.6	17.0	20.4	17.0	
25000	28.9	22.0	25.8	12.1	19.3	24.2	21.6	17.0	10.8	13.7	13.6	14.7	8.5	15.8	11.1	10.2	8.0	7.6	6.4	

[illegible]

TABLE 1	A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			) IDENTIFICATION:
	AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			) OMEGA 8.2
	(OPERATION:) METEOROLOGY:) AIRCRAFT CODE 730																			) TEST 77-730-001
	(MILITARY POWER 97% RPM) TEMP = 59 F) OPERATION CODE 00104																			) RUN 03
	(SINGLE ENGINE) BAR PRESS = 29.92 IN HG) PROFILE VERSION A																			) 28 NOV 79
	(GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) PAGE F3																			
	(DELTA N = 0.0 DB)																			
	ANGLE (DEGREES)																			
	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
DISTANCE																				
(FEET)																				
200	95.2	93.3	97.5	93.4	95.5	97.8	96.1	95.8	96.4	97.6	99.6	100.0	99.9	97.9	92.8	91.5	90.6	92.2	87.9)
250	93.2	91.3	95.4	91.2	93.4	95.6	94.0	93.7	94.1	95.4	97.4	97.8	97.6	95.7	90.6	89.4	88.5	98.1	85.8)
315	91.1	89.2	93.3	89.0	91.2	93.5	91.8	91.5	91.8	93.1	95.0	95.4	95.2	93.4	88.4	87.2	86.3	88.0	83.7)
400	89.1	87.1	91.1	86.8	89.0	91.3	89.7	89.3	89.5	90.7	92.6	93.0	92.8	91.8	86.2	85.0	84.1	85.9	81.5)
500	87.0	85.0	88.9	84.5	86.7	89.1	87.4	87.1	87.1	88.3	90.1	90.5	90.2	88.6	83.9	82.7	81.9	83.7	79.3)
630	84.9	82.8	86.7	82.2	84.4	86.8	85.2	84.8	84.6	85.8	87.6	87.9	87.5	86.1	81.6	80.4	79.6	81.4	77.1)
800	82.7	80.6	84.4	79.8	82.1	84.5	82.8	82.5	82.8	83.3	84.9	85.2	84.7	83.5	79.2	78.8	77.3	79.1	74.8)
1000	80.5	78.3	82.0	77.4	79.6	82.1	80.5	80.1	79.4	80.6	82.1	82.4	81.8	80.8	76.8	75.5	74.9	76.8	72.4)
1250	78.1	75.8	79.5	74.8	77.1	79.6	78.0	77.6	76.7	77.8	79.2	79.4	78.7	78.0	74.2	73.0	72.3	74.3	69.9)
1600	75.6	73.2	76.9	72.1	74.5	77.0	75.4	75.1	73.8	75.0	76.1	76.3	75.5	75.1	71.6	70.3	69.7	71.8	67.4)
2000	73.0	70.6	74.2	69.3	71.8	74.3	72.8	72.4	70.9	72.0	72.9	73.1	72.1	72.0	68.8	67.5	66.9	69.2	64.7)
2500	69.7	67.4	71.1	66.2	68.7	71.4	69.8	69.5	67.8	68.8	69.5	69.6	68.5	68.7	65.9	64.5	63.9	66.3	61.7)
3150	65.9	64.0	67.6	62.9	65.5	68.2	66.7	66.5	64.4	65.4	66.0	66.0	64.8	65.2	62.7	61.3	60.7	63.3	58.5)
4000	61.9	60.3	64.3	59.2	61.9	64.6	63.2	63.1	60.7	61.7	62.2	62.0	60.8	61.4	59.2	57.7	57.1	59.9	54.9)
5000	57.3	56.2	60.3	55.2	57.9	60.7	59.3	59.3	56.7	57.6	58.0	57.7	56.4	57.2	55.2	53.8	53.2	56.1	51.0)
6300	52.7	51.8	56.1	50.9	53.5	56.4	55.1	55.1	52.3	53.2	53.5	53.1	51.8	52.7	50.9	49.4	48.0	51.9	46.7)
8000	49.2	47.9	51.9	46.6	49.3	52.2	50.9	51.0	47.9	48.7	48.9	48.6	47.3	48.4	46.8	45.3	44.7	47.8	42.7)
10000	45.3	43.7	47.3	42.0	44.8	47.7	46.4	46.3	43.1	43.7	44.0	43.8	42.5	43.8	42.4	40.8	40.1	43.2	38.2)
12500	41.2	39.1	42.3	37.0	39.9	42.7	41.4	41.2	38.0	38.3	38.6	38.7	37.4	38.9	37.5	35.8	35.1	38.1	33.4)
16000	38.7	34.1	36.9	34.6	37.3	35.9	35.4	35.4	32.3	32.4	32.7	33.3	32.0	33.5	32.1	30.4	29.7	32.4	28.2)
20000	34.9	28.8	31.1	25.9	28.9	31.3	29.9	29.0	26.3	26.0	26.4	27.4	26.1	27.7	26.2	24.6	23.9	26.2	22.5)
25000	26.6	23.1	25.8	19.8	22.7	24.9	23.4	22.0	19.8	19.2	19.7	21.3	20.8	21.5	19.8	18.6	18.0	19.5	16.7)

(		) IDENTIFICATION:	(
(		) OMEGA 8.2	(
(		) TEST 77-730-001	(
(		) RUN 03	(
(		) AIRCRAFT CODE 730	(
(		) OPERATION CODE 00104	(
(		) PROFILE VERSION A	(
(		) 28 NOV 79	(
(		) PAGE J3	(
<hr/>			
(		) METEOROLOGY:	(
(		) TEMP = 59 F	(
(		) BAR PRESS =29.92 IN HG	(
(		) REL HUMID = 70 %	(
(		) DELTA N = 0.0 DB	(
<hr/>			
(		) OPERATIONS:	(
(		) MILITARY POWER 97% RPM	(
(		) SINGLE ENGINE	(
(		) GROUND RUNUP (SUPPRESSED)	(
()	(
<hr/>			
(		) NOISE SOURCE/SUBJECT:	(
(	F-100 NOISE SUPPRESSOR		(
(	AF32A-16		(
((
<hr/>			
(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE		(
((
(DISTANCE = 250 FEET		(
((
<hr/>			

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( ) DISTANCE = 250 FEET ) TEST 77-730-001  
(-----) RUN 03  
( ) NOISE SOURCE/SUBJECT: )  
( ) F-160 NOISE SUPPRESSOR )  
( ) AF32A-16 )  
( ) OPERATION: ) METEOROLOGY:  
( ) MILITARY POWER 97% RPM ) TEMP = 59 F ) AIRCRAFT CODE 730  
( ) SINGLE ENGINE ) BAR PRESS =29.92 IN HG ) OPERATION CODE 00104  
( ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % ) PROFILE VERSION A  
( ) DELTA N = 0.0 DB ) 28 NOV 79 )  
( ) PAGE J3 )
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((NOISE SOURCE/SUBJECT:	(OPERATION:	(METEOROLOGY:	(AIRCRAFT CODE 730
((F-100 NOISE SUPPRESSOR	(MILITARY POWER 97% RPM	(TEMP	(OPERATION CODE 00104
(	(	AF32A-16	(	SINGLE ENGINE	(	BAR PRESS =29.92 IN HG	(	PROFILE VERSION A
(	(		(	GROUND RUNUP (SUPPRESSED)	(	REL HUMID = 70 %	(	28 NOV 79
(	(		(		(	DELTA N = 0.0 DB	(	PAGE J3

```
( ( F-100 NOISE SUPPRESSOR ) ) MILITARY POWER 97% RPM ) TEMP = 59 F ) OPERATION CODE 00104 )
( ( AF32A-16 ) ) SINGLE ENGINE ) BAR PRESS =29.92 IN HG ) PROFILE VERSION A )
( ( ) ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % ) 28 NOV 79 )
( ( ) ) DELTA N = 0.0 DB ) PAGE J3 )
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( ( AF32A-16 ) ( SINGLE ENGINE ) ( BAR PRESS =29.92 IN HG ) PROFILE VERSION A  
( ( ) ( GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % ) 28 NOV 79  
( ( ) ( ) DELTA N = 0.0 DB ) PAGE J3
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( ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % ) 28 NOV 79 )  
( ) ) DELTA N = 0.0 DB ) PAGE J3 )
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DELTA K - U.S. DB 3

	P=PNLT	A=AL	T=ALT
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()

		NOISE LEVEL IN PNDB OR DBA										
		20	30	40	50	60	70	80	90	100	110	120
A N G L E I N D E G R E E S	0									AT		
	10								X		P	
	20									AT		
	30								AT		P	
	40								X		P	
	50									X		P
	60								X		P	
	70								X		P	
	80								X		P	
	90									AT		P
	100									X		P
110									X		P	
120									X		P	
130										X		P
140									X		P	
150									AT		P	
160									X		P	
170									X		P	
180									X		P	

(TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB) (1/3 OCTAVE BAND (DISTANCE = 250 FEET (IDENTIFICATION: (OMEGA 8.2 (TEST 77-730-001 (RUN 04 (NOISE SOURCE/SUBJECT: (F-100 NOISE SUPPRESSOR (AF32A-16 (OPERATION: (AFTERBURNER POWER (SINGLE ENGINE (GROUND RUNUP (SUPPRESSED) (METEOROLOGY: (TEMP = 59 F (BAR PRESS = 29.92 IN HG (REL HUMID = 70 % (DELTA N = 0.0 DB (AIRCRAFT CODE 730 (OPERATION CODE 00103 (PROFILE VERSION A (28 NOV 79 (PAGE C4 (
(BAND CENTER (FREQ (HZ) (
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
50	92	90	90	91	90	89	90	89	91	91	91	91	92	90	90	91
63	92	92	92	93	92	91	90	88	91	90	90	90	91	91	93	91
80	89	89	91	89	90	90	87	86	89	88	88	89	89	89	91	95
100	82	82	85	83	84	83	82	82	86	87	87	88	88	88	89	91
125	84	83	86	85	84	84	82	80	80	82	81	82	86	87	86	86
160	82	80	82	83	83	84	81	80	78	79	79	79	83	82	82	84
200	85	82	83	81	79	79	79	75	77	81	78	78	81	79	78	80
250	88	86	88	83	81	79	78	76	78	81	79	79	81	82	79	80
315	95	90	88	83	81	81	77	77	79	79	79	79	85	89	85	85
400	97	91	87	87	87	85	81	84	83	81	82	82	84	87	85	86
500	87	81	81	85	88	89	85	83	87	84	84	85	86	87	84	83
630	86	79	81	84	87	88	86	84	87	86	86	86	85	87	86	86
800	88	81	87	85	89	91	89	89	92	90	89	89	88	89	87	85
1000	86	80	89	88	88	90	90	89	91	89	88	87	86	86	85	84
1250	81	78	87	87	87	89	89	87	88	87	84	84	85	85	83	83
1600	80	77	88	86	85	90	86	85	89	88	86	86	85	85	84	82
2000	76	74	86	85	82	87	83	82	88	87	86	88	89	85	82	81
2500	75	73	85	84	82	85	82	81	86	87	86	90	89	86	81	80
3150	72	70	82	81	80	83	81	79	85	87	87	91	90	87	80	79
4000	70	69	82	81	80	83	80	81	85	85	86	89	90	86	79	78
5000	65	66	78	77	77	79	77	77	83	86	86	87	87	84	77	74
6300	64	64	77	77	76	78	75	76	81	83	83	85	86	81	77	76
8000	60	62	74	74	73	75	72	73	77	79	80	81	76	72	72	70
10000	55	57	69	70	68	71	67	69	74	76	75	77	78	72	67	66
OVERALL	102	98	100	99	99	100	99	98	100	100	99	101	101	100	99	100
																100

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-100 NOISE SUPPRESSOR																			
AF32A-16																			
(OPERATIONS:																			
(AFTERBURNER POWER																			
(SINGLE ENGINE																			
(GROUND RUNUP (SUPPRESSED)																			
(
) METEOROLOGY:																			
) TEMP = 59 F																			
) BAR PRESS = 29.92 IN HG																			
) REL HUMID = 70 %																			
) DELTA N = 0.0 DB																			
) AIRCRAFT CODE 730																			
) OPERATION CODE 00103																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE E4																			
) IDENTIFICATIONS:																			
) OMEGA 8.2																			
) TEST 77-730-001																			
) RUN 84																			

DISTANCE																			
(FEET)																			
ANGLE (DEGREES)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
230	111.6	107.4	111.9	111.2	110.4	112.5	110.0	109.3	113.1	113.7	113.4	115.7	116.0	114.4	109.5	109.0	108.6	106.4	106.3
250	109.5	105.3	109.7	109.0	108.2	110.3	107.8	107.0	110.8	111.4	111.1	113.4	113.8	112.2	107.3	106.8	106.4	104.2	104.2
315	107.4	103.1	107.4	106.7	106.0	108.1	105.5	104.7	108.5	109.1	108.8	111.1	111.4	109.9	105.0	104.6	104.2	102.1	102.0
400	105.2	100.9	105.1	104.4	103.6	105.8	103.2	102.3	106.1	106.7	106.3	108.7	109.0	107.5	102.7	102.3	101.9	99.8	99.8
500	102.9	98.6	102.7	102.0	101.2	103.4	100.8	99.9	103.6	104.2	103.8	106.1	106.4	105.0	100.3	99.9	99.6	97.4	97.5
630	100.6	96.2	100.1	99.4	98.6	100.9	98.3	97.4	101.1	101.5	101.1	103.4	103.7	102.3	97.7	97.3	97.1	95.0	95.0
800	98.3	93.8	97.4	96.7	95.9	98.3	95.7	94.8	98.4	98.7	98.3	100.6	100.9	99.5	95.0	94.6	94.6	92.4	92.5
1000	95.8	91.3	94.5	93.8	93.1	95.6	93.0	92.0	95.6	95.7	95.2	97.5	97.8	96.5	92.2	91.8	91.8	89.7	89.9
1250	93.2	88.6	91.6	90.7	90.1	92.7	90.1	89.1	92.6	92.6	92.1	94.2	94.5	93.3	89.2	88.7	89.0	86.9	87.1
1600	90.5	85.8	88.4	87.5	87.0	89.6	87.0	86.0	89.4	89.2	88.7	90.7	90.9	89.9	86.0	85.4	86.0	84.0	84.2
2000	87.7	82.8	85.0	84.0	83.8	86.3	83.7	82.6	85.9	85.6	85.0	87.0	87.0	86.2	82.6	82.0	82.8	80.8	81.0
2500	83.9	78.9	81.3	80.2	80.3	82.7	80.2	79.2	82.3	81.7	80.9	82.9	82.9	82.2	78.9	78.2	79.3	77.4	77.6
3150	79.7	74.6	77.2	76.1	76.6	78.7	76.4	75.5	78.6	77.6	76.7	78.3	78.5	78.0	75.0	74.2	75.5	73.7	73.6
4000	74.8	69.5	72.6	71.6	72.4	74.3	72.2	71.4	74.4	73.4	72.4	73.2	73.6	73.5	70.7	69.8	71.4	69.6	69.1
5000	69.3	63.9	67.7	67.0	67.8	69.8	67.7	66.9	69.9	68.7	67.7	68.2	68.3	68.7	66.0	65.1	66.7	65.8	64.3
6300	63.6	58.1	62.6	62.0	62.8	64.8	62.8	61.9	64.9	63.6	62.5	63.0	63.1	63.3	60.9	59.9	61.8	60.8	59.2
8000	59.6	53.9	57.8	57.2	58.3	60.2	58.1	57.1	60.2	58.9	57.7	58.1	58.2	58.7	56.4	55.4	57.3	55.4	54.8
10000	55.1	49.0	52.4	51.7	53.1	55.1	52.7	51.8	54.9	53.5	52.2	52.5	52.9	53.2	51.2	50.3	52.4	50.1	50.1
12500	50.7	44.3	45.7	44.9	47.2	48.9	46.8	45.9	49.0	47.3	45.9	46.2	46.5	47.2	44.8	44.1	46.0	44.4	44.5
16000	45.9	38.6	38.5	38.6	40.8	42.2	39.5	38.3	42.1	40.8	38.7	38.7	38.8	40.6	38.1	36.5	38.7	37.7	38.0
20000	40.0	32.4	30.6	31.0	33.6	34.6	30.7	29.8	33.3	31.0	29.9	30.5	31.8	33.8	30.7	29.4	31.8	29.8	31.3
25000	33.0	24.7	19.5	19.6	25.2	26.3	20.0	16.5	23.8	18.4	16.7	20.4	21.7	25.4	19.9	17.1	21.5	20.5	21.0

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: (F-100 NOISE SUPPRESSOR AF32A-16)																			
(OPERATION: (AFTERBURNER POWER SINGLE ENGINE GROUND RUNUP (SUPPRESSED))																			
(METEOROLOGY: (TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB)																			
IDENTIFICATION: (OMEGA 8.2 TEST 77-730-001 RUN 04 AIRCRAFT CODE 730 OPERATION CODE 00103 PROFILE VERSION A 20 NOV 79 PAGE F4)																			
ANGLE (DEGREES)																			
DISTANCE (FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	90.2	92.0	98.7	97.0	98.0	100.4	98.6	97.6	100.7	100.2	99.5	101.2	101.4	99.4	96.2	95.3	96.2	94.4	93.7
250	96.1	90.0	96.5	95.7	95.9	98.3	96.5	95.5	98.6	98.0	97.3	99.0	99.1	97.2	94.0	93.2	94.1	92.3	91.6
315	94.1	88.7	94.3	93.5	93.7	96.1	94.3	93.3	96.4	95.8	95.0	96.7	96.8	95.0	91.9	91.0	92.0	90.2	89.5
400	92.0	86.6	92.1	91.3	91.5	93.9	92.2	91.1	94.2	93.5	92.7	94.3	94.4	92.7	89.7	88.8	89.8	88.0	87.4
500	89.9	84.5	89.9	89.0	89.3	91.7	89.9	88.9	91.9	91.2	90.3	91.9	91.9	90.4	87.4	86.5	87.7	85.9	85.2
630	87.7	82.3	87.5	86.7	87.1	89.4	87.7	86.6	89.5	88.7	87.9	89.4	89.4	88.0	85.1	84.3	85.4	83.7	83.8
800	85.6	80.1	85.2	84.3	84.7	87.1	85.3	84.3	87.2	86.3	85.3	86.7	86.7	85.5	82.8	81.9	83.1	81.4	80.7
1000	83.4	77.8	82.7	81.9	82.4	84.7	82.9	81.9	84.7	83.7	82.7	84.0	84.0	83.0	80.4	79.5	80.8	79.1	78.4
1250	81.0	75.4	80.1	79.3	79.9	82.1	80.5	79.4	82.1	81.0	80.0	81.2	81.1	80.3	77.9	76.9	78.4	76.7	76.0
1600	78.5	72.8	77.4	76.7	77.3	79.5	77.9	76.8	79.5	78.3	77.2	78.2	78.1	77.5	75.2	74.3	75.8	74.2	73.5
2000	76.0	70.2	74.6	73.9	74.7	76.8	75.2	74.1	76.7	75.4	74.3	75.2	75.0	74.7	72.5	71.6	73.2	71.6	70.9
2500	72.7	66.9	71.5	70.9	71.8	73.9	72.3	71.2	73.8	72.4	71.3	71.9	71.7	71.6	69.6	68.6	70.3	68.6	68.0
3150	69.1	63.2	68.2	67.6	68.7	70.7	69.2	68.1	70.7	69.2	68.0	68.5	68.3	68.3	66.4	65.4	67.2	65.8	64.8
4000	65.2	59.2	64.6	64.1	65.2	67.3	65.9	64.8	67.3	65.7	64.5	64.8	64.6	64.7	62.9	61.8	63.8	62.4	61.3
5000	60.9	54.7	60.6	60.1	61.3	63.4	62.0	61.0	63.4	61.8	60.6	60.8	60.5	60.7	58.9	57.9	59.9	58.5	57.3
6300	56.3	50.2	56.3	55.7	57.0	59.1	57.8	56.7	59.2	57.5	56.3	56.3	56.0	56.3	54.6	53.5	55.6	54.2	53.1
8000	52.6	46.4	51.9	51.4	52.9	54.8	53.5	52.5	54.9	53.2	52.0	52.1	51.7	52.2	50.6	49.4	51.6	50.2	49.1
10000	48.6	42.4	47.8	46.7	48.4	50.2	48.8	47.7	50.3	48.5	47.4	47.5	47.1	47.8	46.1	45.0	47.1	45.9	44.8
12500	44.3	38.1	41.7	40.6	43.5	45.1	43.5	42.4	45.1	43.2	42.3	42.4	42.1	43.0	41.3	40.1	42.2	41.1	40.2
16000	39.6	33.5	35.8	35.0	38.0	39.5	37.6	36.5	39.3	37.4	36.7	36.8	36.6	37.7	36.0	34.8	36.9	35.9	35.1
20000	34.6	28.6	29.6	29.0	32.1	33.3	31.1	30.0	32.9	31.0	30.4	30.7	30.6	31.9	30.1	29.1	31.8	30.8	29.5
25000	29.1	23.4	23.2	23.6	25.6	26.5	24.8	22.8	25.8	24.0	23.5	23.9	24.1	25.6	23.9	23.1	24.7	23.7	23.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA) AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT: F-100 NOISE SUPPRESSOR AF32A-16																
OPERATION: AFTERBURNER POWER SINGLE ENGINE GROUND RUNUP (SUPPRESSED)																
METEOROLOGY: TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB																
IDENTIFICATION: OMEGA 8.2 TEST 77-730-801 AIRCRAFT CODE 730 OPERATION CODE 00103 PROFILE VERSION A 28 NOV 79 PAGE 64																
DISTANCE (FEET)																
ANGLE (DEGREES)																
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
200	99.1	93.7	90.7	97.8	98.0	100.4	98.6	97.6	100.7	100.2	99.5	101.2	101.4	100.0	96.2	95.3
250	97.1	91.7	96.5	95.7	95.9	98.3	96.5	95.5	98.6	98.0	97.3	99.0	99.1	97.8	94.0	92.3
315	95.0	89.6	94.3	93.5	93.7	96.1	94.3	93.3	96.4	95.8	95.0	96.7	96.8	95.6	91.9	90.2
400	92.9	87.5	92.1	91.3	91.5	93.9	92.2	91.1	94.2	93.5	92.7	94.3	94.4	93.3	89.7	88.0
500	90.8	85.4	89.9	89.0	89.3	91.7	89.9	88.9	91.9	91.2	90.3	91.9	91.9	91.0	87.4	86.5
630	88.7	83.2	87.5	86.7	87.1	89.4	87.7	86.6	89.5	88.7	87.9	89.4	89.4	88.6	85.1	84.3
800	86.5	81.0	85.2	84.3	84.7	87.1	85.3	84.3	87.2	86.3	85.3	86.7	86.7	86.1	82.8	81.9
1000	84.3	78.7	82.7	81.9	82.4	84.7	82.9	81.9	84.7	83.7	82.7	84.3	84.0	83.6	80.4	79.5
1250	81.9	76.3	80.1	79.3	79.9	82.1	80.5	79.4	82.1	81.0	80.0	81.2	81.1	80.9	77.9	76.9
1600	79.5	73.7	77.4	76.7	77.3	79.5	77.9	76.8	79.5	78.3	77.2	78.2	78.1	78.2	75.2	74.3
2000	77.0	71.1	74.6	73.9	74.7	76.8	75.2	74.1	76.7	75.4	74.3	75.2	75.0	75.3	72.5	71.6
2500	73.7	67.8	71.5	70.9	71.8	73.9	72.3	71.2	73.8	72.4	71.3	71.9	71.7	72.2	69.6	68.6
3150	70.1	64.1	68.2	67.6	68.7	70.7	69.2	68.1	70.7	69.2	68.0	68.5	68.3	68.9	66.4	65.4
4000	66.0	59.9	64.6	64.1	65.2	67.3	65.9	64.8	67.3	65.7	64.5	64.8	64.6	65.2	62.9	61.8
5000	61.4	55.3	60.6	60.1	61.3	63.4	62.0	61.0	63.4	61.8	60.6	60.8	60.5	61.1	58.9	57.9
6300	56.7	50.5	56.3	55.7	57.0	59.1	57.8	56.7	59.2	57.5	56.3	56.3	56.0	56.6	54.6	53.5
8000	52.8	46.6	51.9	51.4	52.9	54.8	53.5	52.5	54.9	53.2	52.0	52.1	51.7	52.4	50.6	49.4
10000	48.6	42.4	47.0	46.7	48.4	50.2	48.8	47.7	50.3	48.5	47.4	47.5	47.1	47.8	46.1	45.0
12500	44.3	38.1	41.7	41.6	43.5	45.1	43.5	42.4	45.1	43.2	42.3	42.4	42.1	43.0	41.3	40.1
15000	39.6	33.5	35.8	36.0	38.0	39.5	37.6	36.5	39.3	37.4	36.7	36.8	36.6	37.7	36.0	34.8
20000	34.6	28.6	29.6	30.0	32.1	33.3	31.1	30.0	32.9	31.0	30.4	30.7	30.6	31.9	30.1	29.1
25000	29.1	23.4	23.2	23.6	25.6	26.5	24.0	22.8	25.8	24.0	23.5	23.9	24.1	25.6	23.9	23.1

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (NOISE SOURCE/SUBJECT:
 (F-100 NOISE SUPPRESSOR
 (AF32A-16
 (OPERATION:
 (AFTERBURNER POWER
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 59 F
 (BAR PRESS = 29.92 IN HG
 (REL HUMID = 70 %
 (DELTA N = 0.0 DB
 (IDENTIFICATION:
 (OMEGA 6.2
 (TEST 77-730-001
 (RUN 04
 (AIRCRAFT CODE 730
 (OPERATION CODE 00103
 (PROFILE VERSION A
 (28 NOV 79
 (PAGE J4
 (

	P=PNLT											A=AL											T=ALT											
	20	30	40	50	60	70	80	90	100	110	120	20	30	40	50	60	70	80	90	100	110	120	20	30	40	50	60	70	80	90	100	110	120	
0	(.	(.	(.)
10	(.	(.	(.)
20	(.	(.	(.)
30	(.	(.	(.)
40	(.	(.	(.)
50	(.	(.	(.)
60	(.	(.	(.)
70	(.	(.	(.)
80	(.	(.	(.)
90	(.	(.	(.)
100	(.	(.	(.)
110	(.	(.	(.)
120	(.	(.	(.)
130	(.	(.	(.)
140	(.	(.	(.)
150	(.	(.	(.)
160	(.	(.	(.)
170	(.	(.	(.)
180	(.	(.	(.)

A N G L E I N D E G R E E S

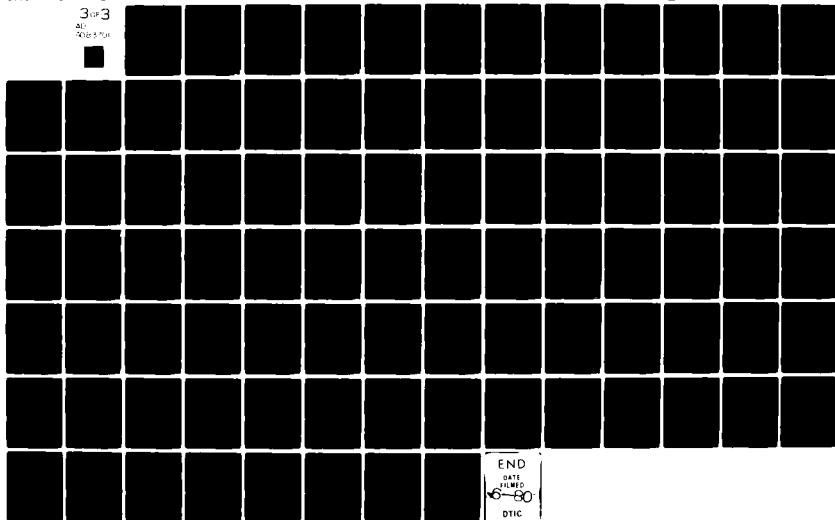
AD-A083 701

AIR FORCE AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATT--ETC F/G 1/2
COMMUNITY NOISE EXPOSURE RESULTING FROM AIRCRAFT OPERATIONS. V0--ETC(U)
DEC 79 R A LEE
AMRL-TR-73-110-VOL-7

UNCLASSIFIED

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3 of 3
ALL
EXEMPT



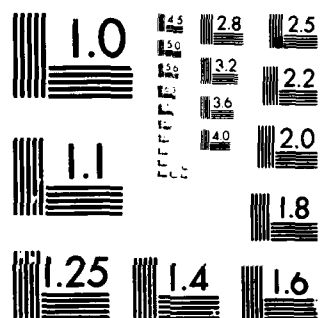
END

DATE

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6-80

DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																	IDENTIFICATIONS:		
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																	OMEGA 8.2		
NOISE SOURCE/SUBJECT:																	TEST 77-778-881		
(F-106 NOISE SUPPRESSOR																	RUN 01		
(AF 32A-17																	AIRCRAFT CODE 778		
(GROUND RUNUP																	OPERATION CODE 08113		
(																	BAR PRESS =29.92 IN HG		
(																	REL HUMID = 70 %		
(																	DELTA N = 0.0 DB		
(																	PAGE E1		
(
DISTANCE																	ANGLE (DEGREES)		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.0	88.7	86.4	84.0	81.6	79.2	76.8	74.4	72.0	69.6	67.2	64.8	62.4	60.0	57.6	55.2	52.8	50.4	48.0
250	89.5	86.4	84.0	81.6	79.2	76.8	74.4	72.0	69.6	67.2	64.8	62.4	60.0	57.6	55.2	52.8	50.4	48.0	45.6
315	87.1	84.0	81.6	79.2	76.8	74.4	72.0	69.6	67.2	64.8	62.4	60.0	57.6	55.2	52.8	50.4	48.0	45.6	43.2
400	84.7	81.6	79.2	76.8	74.4	72.0	69.6	67.2	64.8	62.4	60.0	57.6	55.2	52.8	50.4	48.0	45.6	43.2	40.8
500	82.2	79.1	76.0	72.9	69.8	66.7	63.6	60.5	57.4	54.3	51.2	48.1	45.0	41.9	38.8	35.7	32.6	29.5	26.4
630	79.6	76.4	73.2	70.0	66.8	63.6	60.4	57.2	54.0	50.8	47.6	44.4	41.2	38.0	34.8	31.6	28.4	25.2	22.0
800	76.8	73.6	70.4	67.2	64.0	60.8	57.6	54.4	51.2	48.0	44.8	41.6	38.4	35.2	32.0	28.8	25.6	22.4	19.2
1000	73.9	70.6	67.3	64.0	60.7	57.4	54.1	50.8	47.5	44.2	40.9	37.6	34.3	31.0	27.7	24.4	21.1	17.8	14.5
1250	70.6	67.2	63.8	60.4	57.0	53.6	50.2	46.8	43.4	40.0	36.6	33.2	29.8	26.4	23.0	19.6	16.2	12.8	9.4
1500	67.0	63.6	60.2	56.8	53.4	50.0	46.6	43.2	39.8	36.4	33.0	29.6	26.2	22.8	19.4	16.0	12.6	9.2	5.8
2000	63.5	60.2	56.9	53.6	50.3	47.0	43.7	40.4	37.1	33.8	30.5	27.2	23.9	20.6	17.3	14.0	10.7	7.4	4.1
2500	59.7	56.4	53.1	49.8	46.5	43.2	39.9	36.6	33.3	30.0	26.7	23.4	20.1	16.8	13.5	10.2	6.9	3.6	0.3
3150	55.4	52.1	48.8	45.5	42.2	38.9	35.6	32.3	29.0	25.7	22.4	19.1	15.8	12.5	9.2	5.9	2.6	-0.7	-4.0
4000	50.3	47.0	43.7	40.4	37.1	33.8	30.5	27.2	23.9	20.6	17.3	14.0	10.7	7.4	4.1	0.8	-2.5	-5.8	-9.1
5000	44.8	41.5	38.2	34.9	31.6	28.3	25.0	21.7	18.4	15.1	11.8	8.5	5.2	1.9	-1.4	-4.7	-8.0	-11.3	-14.6
6300	38.8	35.5	32.2	28.9	25.6	22.3	19.0	15.7	12.4	9.1	5.8	2.5	-0.8	-4.1	-7.4	-10.7	-14.0	-17.3	-20.6
8000	32.4	29.1	25.8	22.5	19.2	15.9	12.6	9.3	6.0	2.7	-0.6	-3.9	-7.2	-10.5	-13.8	-17.1	-20.4	-23.7	-27.0
10000	23.3	20.0	16.7	13.4	10.1	6.8	3.5	0.2	-3.1	-6.4	-9.7	-13.0	-16.3	-19.6	-22.9	-26.2	-29.5	-32.8	-36.1
12500	11.8	8.5	5.2	1.9	-1.4	-4.7	-8.0	-11.3	-14.6	-17.9	-21.2	-24.5	-27.8	-31.1	-34.4	-37.7	-41.0	-44.3	-47.6
16000	4.4	1.1	-2.2	-5.5	-8.8	-12.1	-15.4	-18.7	-22.0	-25.3	-28.6	-31.9	-35.2	-38.5	-41.8	-45.1	-48.4	-51.7	-55.0
20000	0.4	-2.9	-6.2	-9.5	-12.8	-16.1	-19.4	-22.7	-26.0	-29.3	-32.6	-35.9	-39.2	-42.5	-45.8	-49.1	-52.4	-55.7	-59.0
25000																			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA) AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT: F-106 NOISE SUPPRESSOR AF 32A-17 GROUND RUNUP																			
OPERATIONS: IDLE POWER (59% RPH) SINGLE ENGINE GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY: TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB																			
IDENTIFICATION: OMEGA 8.2 TEST 77-778-001 RUN 81 AIRCRAFT CODE 778 OPERATION CODE 00113 PROFILE VERSION A 28 NOV 79 PAGE 61																			
DISTANCE (FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	78.6	74.6	70.6	66.6	62.6	58.6	54.6	50.6	46.6	42.6	38.6	34.6	30.6	26.6	22.6	18.6	14.6	10.6	6.6
250	76.5	72.5	68.5	64.5	60.5	56.5	52.5	48.5	44.5	40.5	36.5	32.5	28.5	24.5	20.5	16.5	12.5	8.5	4.5
315	74.3	70.3	66.3	62.3	58.3	54.3	50.3	46.3	42.3	38.3	34.3	30.3	26.3	22.3	18.3	14.3	10.3	6.3	2.3
400	72.1	68.1	64.1	60.1	56.1	52.1	48.1	44.1	40.1	36.1	32.1	28.1	24.1	20.1	16.1	12.1	8.1	4.1	0.1
500	69.8	65.8	61.8	57.8	53.8	49.8	45.8	41.8	37.8	33.8	29.8	25.8	21.8	17.8	13.8	9.8	5.8	1.8	0.8
630	67.5	63.5	59.5	55.5	51.5	47.5	43.5	39.5	35.5	31.5	27.5	23.5	19.5	15.5	11.5	7.5	3.5	0.5	0.5
800	65.1	61.1	57.1	53.1	49.1	45.1	41.1	37.1	33.1	29.1	25.1	21.1	17.1	13.1	9.1	5.1	1.1	0.1	0.1
1000	62.7	58.7	54.7	50.7	46.7	42.7	38.7	34.7	30.7	26.7	22.7	18.7	14.7	10.7	6.7	2.7	0.7	0.7	0.7
1250	60.1	56.1	52.1	48.1	44.1	40.1	36.1	32.1	28.1	24.1	20.1	16.1	12.1	8.1	4.1	0.1	0.1	0.1	0.1
1600	57.4	53.4	49.4	45.4	41.4	37.4	33.4	29.4	25.4	21.4	17.4	13.4	9.4	5.4	1.4	0.4	0.4	0.4	0.4
2000	54.6	50.6	46.6	42.6	38.6	34.6	30.6	26.6	22.6	18.6	14.6	10.6	6.6	2.6	0.6	0.6	0.6	0.6	0.6
2500	51.7	47.7	43.7	39.7	35.7	31.7	27.7	23.7	19.7	15.7	11.7	7.7	3.7	0.7	0.7	0.7	0.7	0.7	0.7
3150	48.5	44.5	40.5	36.5	32.5	28.5	24.5	20.5	16.5	12.5	8.5	4.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4000	44.8	40.8	36.8	32.8	28.8	24.8	20.8	16.8	12.8	8.8	4.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
5000	40.7	36.7	32.7	28.7	24.7	20.7	16.7	12.7	8.7	4.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
6300	36.2	32.2	28.2	24.2	20.2	16.2	12.2	8.2	4.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8000	31.7	27.7	23.7	19.7	15.7	11.7	7.7	3.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
10000	26.9	22.9	18.9	14.9	10.9	6.9	2.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
12500	21.7	17.7	13.7	9.7	5.7	1.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
16000	16.1	12.1	8.1	4.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20000	10.0	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25000	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (IDENTIFICATION:
 (F-106 NOISE SUPPRESSOR (85% RPM (TEMP = 59 F (OMEGA 8.2
 (AF 32A-17 (SINGLE ENGINE (BAR PRESS =29.92 IN HG (TEST 77-778-001
 (GROUND RUNUP (GROUND RUNUP (SUPPRESSED) (REL HUMID = 78 % (RUN 02
 (((DELTA N = 0.0 DB (AIRCRAFT CODE 778
 (((((PROFILE VERSION A
 (((((28 NOV 79
 (((((PAGE J2
 (

ANGLE IN DEGREES	NOISE LEVEL IN PNDB OR DBA										
	10	20	30	40	50	60	70	80	90	100	110
0
10	AT	.	P
20	AT	.	P
30	AT	.	P
40	AT	.	P
50	AT	.	P
60	AT	.	P
70	AT	.	P
80	AT	.	P
90	AT	.	P
100	AT	.	P
110	AT	.	P
120	AT	.	P
130	AT	.	P
140	AT	.	P
150	AT	.	P
160	AT	.	P
170	AT	.	P
180	AT	.	P

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) AIRCRAFT CODE 778																			
(F-106 NOISE SUPPRESSOR (95% RPM) TEMP = 59 F) OPERATION CODE 00116																			
(AF 32A-17 (SINGLE ENGINE) BAR PRESS =29.92 IN HG) PROFILE VERSION A																			
(GROUND RUNUP (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) 28 NOV 79																			
((DELTA N = 3.0 DB) PAGE C3																			
BAND CENTER																			
FREQ (HZ)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
50	85	85	85	82	80	79	79	78	77	76	78	75	78	80	83	83	85	87	87
63	83	83	83	80	79	81	80	79	77	78	77	77	78	77	76	79	81	84	84
80	81	79	78	78	76	77	80	79	81	80	81	77	80	77	76	76	78	80	84
100	79	79	79	81	80	78	81	76	80	82	80	79	77	78	77	76	77	79	82
125	80	79	82	83	83	81	80	78	79	78	78	76	77	76	77	79	74	75	78
160	81	77	79	83	82	81	81	76	77	76	75	75	74	76	76	78	79	75	79
200	83	79	81	81	81	80	81	78	77	77	76	77	76	76	78	80	80	76	80
250	82	79	81	79	79	78	80	77	77	76	75	75	75	74	75	78	78	74	75
315	82	79	81	81	81	80	80	79	79	78	76	75	75	74	74	73	76	72	73
400	80	79	82	83	79	81	82	82	81	79	77	75	74	73	73	71	73	69	71
500	79	78	79	80	79	79	80	79	79	77	75	75	74	72	71	70	69	66	66
630	80	76	77	78	76	77	78	78	77	76	73	74	72	71	72	70	69	68	65
800	77	75	78	79	78	79	80	81	78	76	72	73	72	72	74	73	74	71	67
1000	76	76	76	79	77	79	80	82	77	75	72	72	73	73	75	75	77	73	69
1250	75	72	71	76	73	73	74	74	71	71	72	71	72	71	74	73	74	70	65
1600	77	75	76	79	77	79	77	81	80	78	76	74	74	73	76	77	79	76	78
2000	73	74	75	78	77	80	77	81	81	78	77	75	74	73	74	76	78	76	70
2500	72	73	73	76	76	77	74	74	75	74	77	76	75	74	74	74	75	74	67
3150	71	71	72	76	76	78	75	74	74	71	75	74	73	74	74	72	74	73	66
4000	72	72	74	78	77	79	78	78	78	73	75	75	76	77	78	75	77	75	69
5000	67	66	68	75	72	74	70	71	72	69	72	71	69	70	71	67	70	67	61
6300	63	62	65	70	67	69	66	67	68	65	67	68	69	68	68	65	67	64	57
8000	61	59	63	65	65	66	65	64	66	63	65	64	65	64	66	61	62	59	53
10000	58	56	60	61	62	63	61	60	64	60	59	60	61	59	60	58	55	55	50
OVERALL	93	92	93	93	92	92	92	92	91	90	90	88	89	88	89	90	91	91	92

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-106 NOISE SUPPRESSOR
 AF 32A-17
 GROUND RUNUP
 OPERATION:
 95% RPM
 SINGLE ENGINE
 GROUND RUNUP (SUPPRESSED)
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB
 IDENTIFICATION:
 OMEGA 0.2
 TEST 77-778-001
 RUN 03
 AIRCRAFT CODE 778
 OPERATION CODE 00116
 PROFILE VERSION A
 28 NOV 79
 PAGE J3

	P=PNLT										T=ALT									
	A=AL																			
	10	20	30	40	50	60	70	80	90	100	110									
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

ANGLE IN DEGREES

NOISE LEVEL IN PNDB OR DBA

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																	IDENTIFICATION:		
1/3 OCTAVE BAND																	OMEGA 8.2		
DISTANCE = 250 FEET																	TEST 77-778-001		
																	RUN 84		
NOISE SOURCE/SUBJECT:																	METEOROLOGY:		
(F-106 NOISE SUPPRESSOR																	TEMP = 59 F		
(AF 32A-17																	BAR PRESS =29.92 IN HG		
(GROUND RUNUP																	REL HUMID = 70 %		
(																	DELTA N = 0.0 DB		
																	PAGE C4		
BAND CENTER																	ANGLE (DEGREES)		
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	88	86	85	83	79	80	78	79	78	77	76	77	81	81	84	84	86	89	88
63	86	86	85	83	80	82	81	80	78	80	77	75	79	78	79	80	83	87	87
80	83	81	79	80	77	80	81	79	79	81	79	79	79	77	80	78	79	84	85
100	80	78	79	81	80	81	82	79	77	80	79	79	78	79	79	78	79	82	82
125	81	79	81	81	82	81	80	78	75	76	77	78	79	78	80	81	77	78	78
160	80	77	79	84	84	80	81	80	76	77	78	79	78	79	76	79	79	78	81
200	82	81	81	81	81	78	79	80	78	77	77	79	76	78	77	81	82	78	81
250	82	81	82	80	80	80	81	81	80	78	77	77	76	76	76	79	81	78	78
315	81	81	85	81	83	83	83	82	82	80	79	78	76	76	78	75	78	78	76
400	79	80	83	83	81	84	85	84	84	81	78	76	74	74	75	73	75	74	74
500	78	80	81	81	80	83	83	83	82	79	76	76	72	72	72	70	74	72	72
630	77	79	79	80	80	81	80	80	79	78	73	74	72	72	73	72	75	73	78
800	76	77	80	81	78	82	79	81	76	74	74	73	74	75	76	74	79	77	71
1000	74	77	79	81	79	83	80	81	76	72	75	75	75	77	77	76	82	79	72
1250	72	73	74	77	77	78	77	77	75	71	75	75	75	75	76	75	77	75	69
1600	72	75	76	79	78	81	81	83	81	75	76	76	74	75	76	76	79	79	74
2000	71	75	77	79	80	84	83	87	85	81	79	76	75	76	76	76	80	80	74
2500	68	72	73	78	77	81	79	80	79	78	80	75	75	77	76	74	74	77	72
3150	68	72	74	78	77	81	79	79	78	75	80	74	76	78	76	75	74	75	78
4000	69	73	76	79	79	82	81	82	79	76	79	75	77	81	79	77	78	78	73
5000	64	67	69	74	75	79	76	75	77	73	77	72	70	72	72	69	71	70	66
6300	60	63	67	70	71	74	71	72	71	69	74	70	71	70	69	65	68	67	63
8000	57	60	63	66	68	70	69	69	68	66	71	66	66	67	67	62	64	62	59
10000	55	57	60	61	63	65	64	65	64	61	66	61	62	62	61	57	58	58	54
OVERALL	94	93	94	94	93	95	94	94	93	91	91	90	90	90	91	91	93	94	93

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)) IDENTIFICATION:	
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE) OMEGA 8.2	
) TEST 77-778-001	
) RUN 05	
NOISE SOURCE/SUBJECT:) METEOROLOGY:	
(F-106 NOISE SUPPRESSOR) TEMP = 59 F	
(AF 32A-17) BAR PRESS = 29.92 IN HG	
(GROUND RUNUP) REL HUMID = 70 %	
() DELTA N = 0.8 DB	
) PAGE E5	
DISTANCE																				
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	104.9	106.8	108.1	110.5	112.6	114.5	116.6	118.6	120.6	122.6	124.6	126.6	128.6	130.6	132.6	134.6	136.6	138.6	140.6	
250	102.8	104.5	105.9	107.2	108.3	109.2	110.4	111.6	112.8	114.0	115.2	116.4	117.6	118.8	120.0	121.2	122.4	123.6	124.8	
315	100.6	102.2	103.6	105.0	106.0	106.9	107.8	108.7	109.6	110.5	111.4	112.3	113.2	114.1	115.0	115.9	116.8	117.7	118.6	
400	98.4	99.8	101.1	103.4	105.5	108.5	104.1	100.7	104.1	102.2	104.3	99.8	101.8	102.3	102.8	103.0	103.2	103.8	104.0	
500	96.0	97.3	98.6	100.9	102.9	104.9	99.3	95.8	99.3	97.4	96.5	94.9	96.7	97.2	97.7	97.9	98.2	100.8	95.3	
630	93.5	94.7	95.9	98.1	100.2	99.2	96.8	93.4	96.8	94.9	93.9	92.3	94.0	94.5	94.9	95.1	95.5	98.2	92.9	
800	90.8	91.9	93.3	95.3	97.3	96.4	94.1	90.9	94.1	92.2	89.6	91.1	91.5	92.0	92.2	92.5	95.5	98.2	90.2	
1000	87.9	89.0	90.6	92.2	94.2	93.5	91.4	88.2	91.3	89.4	88.3	86.7	87.9	88.4	88.8	89.1	89.7	92.7	87.3	
1250	84.7	85.9	87.8	89.1	90.7	90.4	88.6	85.5	88.3	86.4	85.2	83.6	84.7	84.9	85.4	85.9	86.5	89.6	84.3	
1600	81.5	82.9	84.8	85.8	87.2	87.1	85.7	82.6	85.2	83.3	81.8	80.3	81.4	81.4	81.8	82.3	83.0	86.2	81.2	
2000	78.3	79.7	81.7	82.6	83.6	83.9	82.6	79.5	81.7	79.8	78.1	76.6	77.7	77.7	77.9	78.5	79.2	82.6	78.0	
2500	74.6	75.7	77.8	78.7	79.7	80.1	78.8	75.6	77.9	75.9	74.0	72.5	73.7	73.5	73.5	74.3	75.4	78.6	74.8	
3150	70.6	71.5	73.5	74.3	75.5	76.8	74.5	71.5	73.6	71.6	69.4	67.9	69.5	68.9	68.8	69.8	71.2	74.3	69.5	
4000	66.0	66.6	68.5	69.4	70.5	71.2	69.9	66.8	68.6	66.5	64.3	62.9	64.4	63.7	63.4	64.7	66.2	69.1	64.1	
5000	61.0	61.3	63.3	64.3	65.1	66.0	64.9	61.5	63.2	61.0	58.7	57.4	58.8	58.1	57.5	59.2	60.9	63.7	58.2	
6300	55.6	55.6	57.7	58.7	59.4	60.5	59.7	56.0	57.7	55.2	52.6	51.4	52.8	52.1	51.2	53.2	55.3	58.1	52.2	
8000	51.1	50.8	53.0	53.9	54.6	56.1	55.5	51.5	52.9	50.5	46.6	46.0	47.9	46.8	45.9	47.6	50.0	52.9	46.9	
10000	46.0	45.0	48.0	48.9	49.4	51.1	50.9	46.4	48.0	45.3	40.9	40.6	42.0	40.8	39.5	41.4	43.6	47.1	41.4	
12500	40.2	39.3	42.3	43.0	43.8	45.9	45.6	40.9	42.3	39.2	34.2	34.2	35.4	34.8	32.7	35.4	37.4	41.3	35.3	
16000	33.7	32.7	36.2	36.6	37.3	39.5	39.6	34.6	35.8	32.6	26.7	26.7	28.8	27.1	24.9	28.1	30.2	33.5	28.4	
20000	26.1	24.5	28.7	29.0	29.4	32.1	32.2	27.7	29.2	25.6	15.5	15.4	19.4	15.8	13.3	17.8	20.4	25.7	20.1	
25000	10.1	11.4	16.3	18.0	19.0	23.6	23.8	15.8	18.4	13.8	4.3	4.1	10.0	4.5	1.7	5.8	10.6	12.8	7.3	

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) AIRCRAFT CODE 779																			
F-111A NOISE SUPPRESSOR (IDLE POWER 66.9% KPH) TEMP = 59 F) OPERATION CODE 00113																			
AF32A-13 (SINGLE ENGINE) BAR PRESS =29.92 IN HG) PROFILE VERSION A																			
(GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) 28 NOV 79																			
(DELTA N = 0.0 DB) PAGE C1																			
BAND CENTER																			
ANGLE (DEGREES)																			
FREQ (HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	66	65	67	72	66	66	64	63	63	63	61	60	63	63	63	61	63	63	62
63	73	71	75	75	72	67	69	66	67	68	69	67	66	66	66	66	67	67	65
80	76	75	75	74	76	73	72	68	68	70	71	68	68	72	74	73	69	69	69
100	77	74	74	76	74	73	70	70	69	72	72	70	70	70	70	72	72	72	73
125	75	74	74	75	71	71	70	67	70	69	71	67	67	67	69	70	69	69	69
160	79	76	75	76	72	75	71	66	67	69	71	66	69	68	68	70	71	71	71
200	72	70	70	74	69	71	70	69	67	71	69	70	72	64	65	67	69	72	74
250	73	73	73	75	70	71	72	72	69	71	70	68	67	67	68	68	71	73	76
315	73	73	71	72	65	66	68	65	66	70	66	65	65	64	64	67	68	69	70
400	71	69	66	69	62	64	65	64	65	63	62	63	61	62	65	65	65	66	66
500	73	69	66	67	65	66	70	65	66	64	66	66	63	64	68	65	65	66	66
630	65	61	63	65	63	64	67	63	64	62	64	64	61	62	65	62	61	61	61
800	63	61	62	65	61	62	59	59	59	62	60	60	59	59	55	58	58	58	58
1000	60	59	61	64	59	60	60	59	58	59	61	62	58	58	55	58	57	56	56
1250	60	59	61	64	59	58	58	58	57	59	60	59	57	55	52	58	56	54	52
1600	69	66	69	68	65	66	62	62	62	63	63	63	63	62	54	64	56	53	51
2000	79	76	79	77	76	73	72	71	68	68	67	70	68	69	55	69	57	52	50
2500	68	65	70	68	67	64	66	66	64	64	63	65	62	61	57	61	57	52	49
3150	68	65	70	68	67	65	63	63	63	63	63	64	62	61	55	60	56	51	47
4000	74	71	76	75	74	71	71	71	69	68	69	69	66	65	61	65	61	50	46
5000	66	65	71	68	67	66	66	65	68	67	68	67	64	60	54	56	53	49	45
6300	66	66	70	68	67	67	66	68	68	67	68	68	64	59	52	54	51	48	44
8000	67	68	69	66	66	65	65	66	64	66	66	64	60	56	48	50	47	43	40
10000	67	67	64	61	60	61	61	66	62	61	63	59	53	52	41	44	40	37	34
OVERALL	87	85	86	86	84	83	82	81	80	81	81	80	79	79	79	80	80	80	81

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																				
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																				
NOISE SOURCE/SUBJECT:																				
(F-111A NOISE SUPPRESSOR																				
(AF32A-13																				
((OPERATIONS																				
((IDLE POWER 66.9% RPM																				
((SINGLE ENGINE																				
((GROUND RUNUP (SUPPRESSED)																				
(((
METEOROLOGY: = 59 F																				
TEMP																				
BAR PRESS =29.92 IN HG																				
REL HUMID = 70 %																				
DELTA N = 3.0 DB																				
ANGLE (DEGREES)																				
DISTANCE (FEET)																				
IDENTIFICATION:																				
OMEGA 8.2																				
TEST 78-779-001																				
RUN 81																				
AIRCRAFT CODE 779																				
OPERATION CODE 90113																				
PROFILE VERSION A																				
28 NOV 79																				
PAGE F1																				
0	10	20	30	40	50	60	70	81	90	100	110	120	130	140	150	160	170	180		
200	85.5	82.9	86.3	84.7	83.3	81.3	81.0	80.5	79.4	79.5	79.6	79.8	77.5	76.9	73.4	77.0	73.6	73.2	74.0	
250	83.3	80.7	84.0	82.4	81.1	79.0	78.7	78.1	77.0	77.1	77.2	77.5	75.3	74.6	71.3	74.0	71.5	71.1	72.0	
315	81.0	78.3	81.7	80.1	78.7	76.6	76.3	75.7	74.6	74.8	74.8	75.1	72.9	72.4	69.1	72.6	69.3	69.1	70.0	
400	78.7	76.0	79.3	77.8	76.3	74.2	74.0	73.2	72.1	72.3	72.3	72.7	70.6	70.1	66.9	70.4	67.2	67.0	67.9	
500	76.3	73.5	76.8	75.3	73.8	71.7	71.5	70.6	69.6	69.7	69.7	70.2	68.1	67.7	64.7	68.0	64.9	64.8	65.7	
630	73.8	71.0	74.2	72.8	71.2	69.2	68.9	67.9	66.9	67.1	67.0	67.5	65.5	65.2	62.4	65.6	62.6	62.5	63.4	
800	71.3	68.4	71.5	70.1	68.5	66.5	66.3	65.2	64.1	64.4	64.2	64.8	62.9	62.6	60.0	63.1	60.1	60.1	60.9	
1000	68.6	65.7	68.7	67.3	65.6	63.7	63.5	62.3	61.2	61.5	61.3	62.0	60.1	59.9	57.6	60.5	57.6	57.6	58.4	
1250	65.8	62.8	65.7	64.4	62.6	60.7	60.7	59.3	58.2	58.5	58.3	59.0	57.2	57.1	55.1	57.7	54.9	55.0	55.7	
1500	62.8	59.8	62.5	61.3	59.4	57.6	57.7	56.1	55.1	55.4	55.3	56.0	54.1	54.2	52.5	54.0	52.2	52.2	52.8	
2000	59.6	56.6	59.2	58.0	56.1	54.4	54.6	52.8	52.0	52.2	52.1	52.8	50.9	51.0	49.9	51.0	49.3	49.4	49.9	
2500	56.2	53.1	55.6	54.5	52.5	50.9	51.3	49.3	48.6	48.7	48.8	49.5	47.5	47.7	47.0	48.4	46.1	46.1	46.6	
3150	52.3	49.2	51.6	50.6	48.5	47.2	47.7	45.5	44.9	45.0	45.2	45.9	43.8	44.0	43.7	44.7	42.5	42.5	42.8	
4000	48.0	44.9	47.2	46.4	44.2	43.0	43.6	41.4	40.9	41.0	41.3	41.9	39.7	39.9	39.9	40.6	38.5	38.5	38.7	
5000	43.3	40.2	42.3	41.7	39.4	38.5	39.1	36.8	36.4	36.5	37.0	37.5	35.3	35.4	35.6	36.0	34.2	34.1	34.3	
6300	38.1	35.0	36.8	36.7	34.2	33.6	34.4	31.9	31.7	31.8	32.4	32.0	30.5	30.6	31.2	31.2	29.7	29.7	29.8	
8000	33.3	30.3	31.3	31.0	29.1	29.0	30.3	27.5	27.7	27.6	28.2	28.5	26.1	26.2	27.8	26.9	26.1	26.2	26.4	
10000	26.7	25.0	26.9	26.9	24.0	24.4	26.1	23.0	23.5	23.2	23.9	24.1	21.6	21.7	24.1	22.5	22.2	22.5	22.8	
12500	24.3	21.4	20.6	22.1	19.1	19.8	21.8	18.5	19.1	18.6	19.4	19.5	17.1	17.1	20.0	18.0	18.1	18.4	18.9	
15000	19.7	16.9	15.7	17.3	14.2	15.0	17.2	13.7	14.4	13.9	14.5	14.6	12.3	12.3	15.4	13.3	13.6	14.1	14.6	
20000	14.9	12.2	10.8	12.3	9.2	10.0	12.1	8.6	9.3	8.8	9.4	9.3	7.2	7.1	10.4	8.4	8.6	9.4	10.1	
25000	9.6	7.2	5.8	7.3	4.1	4.7	6.4	3.2	3.7	3.6	3.9	3.6	1.9	1.7	4.8	3.3	3.6	4.3	5.2	

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-111A NOISE SUPPRESSOR																			
AF32A-13																			
IDENTIFICATION:																			
OMEGA 6.2																			
TEST 78-779-001																			
RUN 81																			
AIRCRAFT CODE 779																			
OPERATION CODE 06113																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 61																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180																			
200	89.0	86.3	89.5	87.8	86.4	83.9	83.3	82.6	80.9	80.9	80.9	81.7	79.4	79.4	75.5	79.3	75.6	73.7	74.7
250	86.7	84.0	87.2	85.6	84.1	81.6	81.0	80.2	78.6	78.6	78.5	79.4	77.2	77.2	73.4	77.2	73.5	71.7	72.5
315	84.5	81.7	84.9	83.3	81.8	79.3	78.7	77.8	76.2	76.2	76.1	77.0	74.9	74.9	71.2	75.0	71.4	69.6	70.6
400	82.1	79.3	82.5	80.9	79.4	76.9	76.3	75.3	73.7	73.7	73.6	74.5	72.5	72.5	69.1	72.7	69.2	67.5	68.5
500	79.7	76.9	80.0	78.5	76.9	74.4	73.9	72.8	71.1	71.2	71.0	72.0	70.0	70.2	66.8	70.4	66.9	65.3	66.3
630	77.3	74.4	77.4	75.9	74.2	71.8	71.3	70.1	68.4	68.5	68.3	69.4	67.4	67.7	64.5	67.9	64.6	63.0	64.0
800	74.7	71.8	74.7	73.3	71.5	69.1	68.7	67.3	65.6	65.8	65.5	66.6	64.8	65.1	62.2	65.4	62.2	60.7	61.6
1000	72.0	69.1	71.9	70.5	68.7	66.3	65.9	64.4	62.8	62.9	62.6	63.8	62.0	62.5	59.8	62.8	59.7	58.2	59.1
1250	69.2	66.2	68.9	67.6	65.7	63.4	63.0	61.4	59.8	59.9	59.6	60.9	59.1	59.6	57.2	60.0	57.0	55.5	56.3
1600	66.2	63.2	65.8	64.5	62.5	60.3	60.1	58.3	56.7	56.8	56.6	57.8	56.0	56.7	54.7	57.1	54.2	52.8	53.5
2000	63.0	60.0	62.4	61.2	59.1	57.1	57.0	55.0	53.5	53.6	53.4	54.7	52.8	53.6	52.0	54.1	51.3	49.9	50.5
2500	59.6	56.5	58.8	57.7	55.5	53.6	53.7	51.5	50.1	50.1	50.1	51.3	49.4	50.2	49.2	50.7	48.1	46.7	47.2
3150	55.7	52.6	54.8	53.8	51.6	49.8	50.0	47.7	46.5	46.4	46.5	47.7	45.7	46.5	45.6	47.0	44.5	43.1	43.5
4000	51.8	47.6	49.7	48.9	46.7	45.2	45.5	43.1	42.1	42.1	42.3	43.3	41.3	42.0	41.6	42.5	40.2	38.9	39.2
5000	45.3	42.2	44.2	43.6	41.3	40.1	40.5	38.1	37.4	37.4	37.8	38.6	36.4	36.9	36.9	37.4	35.4	34.5	34.7
6300	39.5	36.3	38.1	37.9	35.4	34.6	35.3	32.8	32.4	32.4	32.9	33.5	31.2	31.6	32.1	32.1	30.5	29.9	30.1
8000	34.0	31.0	32.0	32.5	29.7	29.6	30.8	27.9	28.0	27.8	28.5	28.9	26.5	26.7	28.2	27.3	26.5	26.3	26.5
10000	28.7	25.8	25.8	26.9	24.0	24.4	26.1	23.0	23.5	23.2	23.9	24.1	21.6	21.7	24.1	22.5	22.2	22.5	22.8
12500	24.3	21.4	20.6	22.1	19.1	19.8	21.8	18.5	19.1	18.6	19.4	19.5	17.1	17.1	20.0	18.0	18.1	18.4	18.9
16000	19.7	16.9	15.7	17.3	14.2	15.0	17.2	13.7	14.4	13.9	14.5	14.6	12.3	12.3	15.4	13.3	13.6	14.1	14.6
20000	14.9	12.2	10.8	12.3	9.2	10.0	12.1	8.6	9.3	8.8	9.4	9.3	7.2	7.1	10.4	8.4	8.8	9.4	10.1
25000	9.6	7.2	5.8	7.3	4.1	4.7	6.4	3.2	3.7	3.6	3.9	3.6	1.9	1.7	4.8	3.3	3.6	4.3	5.2

(TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 (DISTANCE = 250 FEET
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (AIRCRAFT CODE 779
 (F-111A NOISE SUPPRESSOR (IDLE POWER 66.9% RPM (TEMP = 59 F (OPERATION CODE 88113
 (AF32A-13 (SINGLE ENGINE (BAR PRESS = 29.92 IN HG (PROFILE VERSION A
 (GROUND RUNUP (SUPPRESSED) (REL HUMID = 70 % (28 NOV 79
 (DELTA N = 0.0 DB (PAGE J1
 (IDENTIFICATION:
 (OMEGA 8.2
 (TEST 78-779-001
 (RUN 81
 (

	P=PNLT										T=ALT									
	A=AL																			
	10	20	30	40	50	60	70	80	90	100	110									
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

A N C L E I N D E G R E E S

(TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB) (1/3 OCTAVE BAND (DISTANCE = 250 FEET (NOISE SOURCE/SUBJECT: (OPERATIONS: (METEOROLOGY: (AIRCRAFT CODE 779 (F-111A NOISE SUPPRESSOR (ENGINE RUNUP 75% RPM (TEMP = 59 F (OPERATION CODE 00120 (AF32A-13 (SINGLE ENGINE (BAR PRESS = 29.92 IN HG (PROFILE VERSION A ((GROUND RUNUP (SUPPRESSED) (REL HUMID = 70 % (28 NOV 79 ((DELTA N = 0.0 DB (PAGE 02 (BAND CENTER (FREQ (HZ) 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180) (50 72 71 69 69 68 70 69 69 68 67 66 65 65 66 66 67 68 69) (63 75 74 74 75 72 72 71 70 69 68 67 66 65 66 66 67 67 68) (80 77 75 76 76 75 75 74 73 72 71 70 69 68 68 68 68 68 68) (100 80 76 74 73 73 73 74 73 72 71 70 69 68 68 68 68 68 68) (125 78 76 74 74 74 75 74 73 72 71 70 69 68 68 68 68 68 68) (160 80 79 75 74 74 75 74 73 72 71 70 69 68 68 68 68 68 68) (200 76 77 70 71 72 72 71 70 69 68 67 66 65 65 65 65 65 65) (250 76 79 73 73 72 72 71 70 69 68 67 66 65 65 65 65 65 65) (315 76 78 71 70 67 69 68 68 67 66 65 64 64 64 64 64 64 64) (400 75 76 68 67 66 66 67 67 66 65 64 63 63 63 63 63 63 63) (500 76 75 67 66 66 67 67 66 65 64 63 63 63 63 63 63 63 63) (630 73 72 68 71 67 68 68 68 67 66 65 64 64 64 64 64 64 64) (800 72 71 66 65 65 65 64 64 63 62 61 60 60 60 60 60 60 60) (1000 69 72 63 62 62 62 61 61 60 60 59 59 59 59 59 59 59 59) (1250 69 72 64 66 62 66 65 64 63 63 62 61 60 59 58 58 58 58) (1600 77 78 75 76 72 72 71 70 69 68 67 66 65 64 63 63 63 63) (2000 73 75 76 74 72 72 71 70 69 68 67 66 65 64 63 63 63 63) (2500 68 70 69 68 68 67 66 65 64 63 63 63 63 63 63 63 63) (3150 72 72 73 72 71 68 68 68 67 66 65 64 63 63 63 63 63 63) (4000 68 71 71 70 68 68 68 67 66 65 64 63 63 63 63 63 63 63) (5000 67 70 69 69 68 67 67 67 67 67 67 67 67 67 67 67 67 67) (6300 64 69 70 68 68 68 68 67 67 67 67 67 67 67 67 67 67 67) (8000 67 68 68 67 67 67 67 67 67 67 67 67 67 67 67 67 67 67) (10000 69 69 68 67 67 67 67 67 67 67 67 67 67 67 67 67 67 67) (OVERALL 89 89 85 85 84 84 84 84 83 82 81 80 80 80 79 78 78 78) 																		
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XXX = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																				IDENTIFICATION:	
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																				OMEGA 8.2	
NOISE SOURCE/SUBJECT:																				TEST 78-779-801	
(F-111A NOISE SUPPRESSOR																				RUN 02	
(AF32A-13																				AIRCRAFT CODE 779	
((OPERATIONS:)																				OPERATION CODE 00120	
((ENGINE RUNUP 75% RPM																				PROFILE VERSION A	
((SINGLE ENGINE																				28 NOV 79	
((GROUND RUNUP (SUPPRESSED)																				PAGE 02	
((DELTA N = 0.0 DB																					
ANGLE (DEGREES)																					
(DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		
(FEET)																					
200	101.0	102.0	100.0	99.3	97.8	97.6	96.9	96.1	95.3	94.6	93.9	93.4	93.0	91.7	89.8	87.9	86.3	85.7	84.7		
250	98.8	99.8	97.7	97.0	95.5	95.3	94.6	93.8	93.0	92.3	91.6	91.1	91.4	89.4	87.5	85.6	84.0	83.4	82.5		
315	96.5	97.5	95.3	94.7	93.2	93.0	92.2	91.4	90.7	89.9	89.2	88.6	89.0	87.0	85.0	83.3	81.7	81.1	80.2		
400	94.1	95.1	92.9	92.3	90.7	90.5	89.8	89.0	88.2	87.4	86.7	86.1	86.5	84.4	82.6	80.9	79.3	78.8	77.9		
500	91.7	92.6	90.3	89.8	88.2	88.0	87.2	86.4	85.7	84.9	84.1	83.4	83.8	81.9	80.1	78.3	76.8	76.3	75.5		
638	89.1	90.0	87.6	87.2	85.5	85.3	84.5	83.7	82.9	82.2	81.4	80.7	81.1	79.2	77.5	75.7	74.1	73.6	72.8		
800	86.4	87.3	84.8	84.4	82.6	82.5	81.7	80.9	80.1	79.3	78.5	77.8	78.3	76.4	74.7	72.9	71.4	70.8	69.9		
1000	83.5	84.4	81.8	81.5	79.6	79.5	78.6	77.8	77.0	76.3	75.5	74.7	75.3	73.4	71.7	70.0	68.5	67.8	66.9		
1250	80.4	81.4	78.5	78.3	76.3	76.2	75.4	74.6	73.8	73.0	72.2	71.4	72.1	70.2	68.5	66.8	65.2	64.5	63.6		
1600	77.1	78.1	75.0	75.0	72.8	72.7	71.9	71.1	70.3	69.4	68.6	67.9	68.5	66.6	64.9	63.2	61.7	60.8	59.8		
2000	73.6	74.5	71.2	71.3	68.9	68.9	68.0	67.2	66.3	65.5	64.7	63.9	64.6	62.8	61.1	59.3	58.0	57.3	56.8		
2500	69.7	70.6	66.9	67.2	64.6	64.5	63.7	62.9	62.0	61.2	60.4	59.6	60.3	58.4	56.6	54.8	53.8	52.9	51.5		
3150	65.3	66.2	62.2	62.7	59.7	59.6	58.8	57.9	57.1	56.2	55.3	54.7	55.3	53.4	51.5	50.0	48.9	48.0	46.4		
4000	60.3	61.2	56.9	57.6	54.4	54.1	53.2	52.4	51.4	50.6	50.0	49.6	49.3	47.1	45.4	44.2	43.0	42.2	40.6		
5000	54.8	55.8	50.9	51.6	48.3	47.5	46.4	45.4	44.8	44.3	43.9	43.6	42.3	40.5	39.2	37.9	36.8	35.7	34.8		
6300	48.6	49.4	43.7	44.7	40.7	39.7	39.3	38.9	38.2	37.8	37.5	36.8	35.2	33.3	31.9	30.1	28.5	25.8	25.4		
8000	43.6	43.2	35.6	36.8	33.1	33.9	33.1	32.7	32.3	31.9	31.6	30.8	29.2	25.6	23.2	22.2	21.2	20.8	19.8		
10000	37.7	37.4	26.6	29.2	24.7	25.0	24.1	24.0	23.7	23.5	23.4	22.6	18.2	15.9	14.9	13.9	12.9	10.3	9.4		
12500	31.3	30.4	16.2	19.3	13.3	15.7	14.3	14.3	14.2	14.1	12.8	12.8	10.0	7.2	6.6	5.6	4.6	3.5			
16000	23.8	21.6	5.8	9.2	1.9	6.5	4.5	4.7	4.7	4.6	2.1	3.0	1.7								
20000	11.8	9.1																			
25000																					

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																													
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																													
NOISE SOURCE/SUBJECT:										METEOROLOGY:										IDENTIFICATION:									
F-111A NOISE SUPPRESSOR										TEMP = 59 F										OMEGA 8.2									
AF32A-13										ENGINE RUNUP 75% RPM										TEST 78-779-001									
										SINGLE ENGINE										RUN 02									
										GROUND RUNUP (SUPPRESSED)										AIRCRAFT CODE 779									
																				OPERATION CODE 00120									
																				PROFILE VERSION A									
																				28 NOV 79									
										DELTA N = 3.0 DB										PAGE E2									
ANGLE (DEGREES)																													
DISTANCE (FEET)																													
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180											
200	103.1	103.5	102.0	101.6	99.4	99.1	98.3	97.4	96.6	95.9	95.5	95.2	93.8	91.7	90.8	89.0	86.8	86.3	85.5										
250	100.9	101.2	99.7	99.3	97.1	96.8	96.0	95.1	94.3	93.6	93.2	92.9	91.4	89.4	88.5	86.7	84.6	84.1	83.3										
315	98.6	98.9	97.3	97.0	94.7	94.4	93.6	92.8	92.0	91.3	90.7	90.4	89.0	87.3	86.1	84.4	82.3	81.8	81.0										
400	96.2	96.5	94.9	94.6	92.2	92.0	91.1	90.3	89.5	88.8	88.3	87.9	86.5	84.4	83.7	82.0	79.9	79.5	78.7										
500	93.7	94.1	92.4	92.1	89.7	89.4	88.6	87.8	86.9	86.3	85.7	85.2	83.8	81.9	81.1	79.5	77.4	77.0	76.3										
630	91.1	91.5	89.7	89.5	87.0	86.8	85.9	85.1	84.2	83.5	83.0	82.5	81.1	79.2	78.5	76.8	74.7	74.3	73.6										
800	88.4	88.8	86.8	86.7	84.1	83.9	83.1	82.2	81.4	80.7	80.1	79.6	78.3	76.4	75.7	74.0	72.0	71.5	70.7										
1000	85.5	85.9	83.8	83.8	81.1	80.9	80.0	79.2	78.3	77.6	77.1	76.5	75.3	73.4	72.7	71.1	69.0	68.5	67.7										
1250	82.5	82.8	80.6	80.6	77.8	77.6	76.8	75.9	75.1	74.3	73.8	73.2	72.1	70.2	69.5	67.9	65.8	65.2	64.4										
1600	79.2	79.5	77.1	77.3	74.3	74.1	73.3	72.4	71.6	70.8	70.2	69.7	68.5	66.6	66.0	64.3	62.3	61.5	60.6										
2000	75.7	76.0	73.2	73.6	70.4	70.3	69.4	68.5	67.6	66.9	66.3	65.7	64.6	62.8	62.1	60.4	58.6	58.0	56.8										
2500	71.8	72.0	68.9	69.5	66.1	66.0	65.1	64.2	63.3	62.6	62.0	61.4	60.3	58.4	57.6	55.9	54.4	53.6	52.3										
3150	67.3	67.6	64.2	65.0	61.2	61.1	60.2	59.3	58.4	57.6	56.9	56.5	55.3	53.4	52.5	51.1	49.5	48.6	47.2										
4000	62.0	62.4	58.6	59.4	55.7	55.2	54.3	53.4	52.4	51.7	51.3	51.1	49.3	47.1	46.2	45.1	43.5	42.7	41.2										
5000	56.1	56.6	52.1	53.0	49.2	48.3	47.2	46.2	45.6	45.1	44.9	44.6	42.3	40.5	39.8	38.6	37.2	36.1	34.4										
6300	49.4	50.0	44.6	45.6	41.3	40.3	39.8	39.5	38.7	38.4	38.1	37.5	35.2	33.3	32.3	30.6	28.7	28.0	25.7										
8000	44.0	43.5	36.0	37.2	33.4	34.2	33.4	33.0	32.5	32.2	31.9	31.2	29.2	25.6	23.4	22.4	21.3	20.2	19.2										
10000	37.7	37.4	26.6	28.2	24.7	25.0	24.1	24.1	23.7	23.5	23.4	22.6	18.2	15.9	14.9	13.9	12.9	10.3	9.4										
12500	31.3	30.4	16.2	19.3	13.3	15.7	14.3	14.3	14.2	14.1	12.8	12.8	10.0	7.2	6.6	5.6	4.6	.5											
16000	23.8	21.6	5.8	9.2	1.9	6.5	4.5	4.7	4.7	4.6	2.1	3.0	1.7																
20000	11.8	9.1																											
25000																													

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

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TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-111A NOISE SUPPRESSOR																			
AF32A-13																			
(OPERATION:)																			
(ENGINE RUNUP 75% RPM)																			
(SINGLE ENGINE)																			
(GROUND RUNUP (SUPPRESSED))																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 78-779-001																			
AIRCRAFT CODE 779																			
OPERATION CODE 00120																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE G2																			
DISTANCE (FEET)																			
ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.3	88.8	87.0	87.0	84.4	83.5	82.8	82.1	81.5	81.1	80.8	80.5	78.9	76.7	75.8	74.2	72.5	71.8	71.0
250	86.1	86.6	84.7	84.7	82.1	81.2	80.5	79.8	79.2	78.7	78.4	78.1	76.6	74.4	73.6	72.0	70.4	69.8	69.0
315	83.9	84.4	82.3	82.4	79.7	78.8	78.1	77.4	76.8	76.3	76.0	75.7	74.2	72.1	71.3	69.8	68.3	67.6	66.9
400	81.6	82.1	79.9	80.0	77.3	76.4	75.7	75.0	74.4	73.9	73.6	73.3	71.8	69.7	69.0	67.6	66.1	65.5	64.8
500	79.3	79.7	77.4	77.6	74.8	73.9	73.2	72.5	71.8	71.4	71.0	70.7	69.3	67.3	66.6	65.3	63.8	63.3	62.5
630	76.9	77.3	74.8	75.0	72.1	71.4	70.6	69.9	69.2	68.8	68.4	68.1	66.7	64.8	64.2	62.9	61.4	60.9	60.3
800	74.5	74.8	72.1	72.4	69.4	68.7	68.0	67.3	66.6	66.1	65.7	65.4	64.0	62.1	61.6	60.4	59.0	58.5	57.9
1000	71.9	72.2	69.3	69.6	66.6	66.0	65.2	64.5	63.8	63.3	63.0	62.6	61.2	59.4	59.0	57.8	56.4	56.0	55.4
1250	69.3	69.5	66.3	66.7	63.6	63.1	62.3	61.6	60.9	60.4	60.1	59.8	58.2	56.5	56.2	55.1	53.7	53.3	52.7
1500	66.5	66.6	63.2	63.7	60.5	60.1	59.3	58.6	58.0	57.5	57.1	56.8	55.2	53.6	53.3	52.3	50.9	50.5	49.8
2000	63.7	63.6	59.9	60.4	57.2	56.9	56.2	55.5	54.9	54.4	54.1	53.8	52.0	50.3	50.3	49.3	48.0	47.5	46.9
2500	60.5	60.3	56.3	57.0	53.8	53.5	52.8	52.2	51.6	51.1	50.9	50.6	48.6	47.2	47.1	46.1	44.8	44.3	43.6
3150	57.1	56.7	52.5	53.3	50.0	49.9	49.2	48.6	48.1	47.7	47.5	47.3	45.0	43.7	43.6	42.6	41.2	40.7	39.9
4000	52.9	52.5	47.8	48.7	45.7	45.5	44.9	44.4	43.9	43.5	43.3	43.1	41.1	39.8	39.5	38.5	37.1	36.6	35.7
5000	48.3	47.8	42.8	43.6	40.6	40.8	40.3	39.8	39.3	38.9	38.7	38.5	36.7	35.5	35.0	34.0	32.7	32.1	31.2
6300	43.3	42.9	37.4	38.2	35.9	35.8	35.3	34.9	34.5	34.1	33.9	33.6	32.1	30.9	30.2	29.2	28.1	27.4	26.6
8000	38.9	38.3	32.5	33.2	31.3	31.4	30.9	30.6	30.2	29.9	29.6	29.4	28.0	26.9	26.2	25.3	24.3	23.7	22.9
10000	34.2	33.6	27.5	28.2	26.5	26.8	26.4	26.1	25.7	25.4	25.1	24.8	23.7	22.7	21.9	21.1	20.3	19.7	19.0
12500	29.7	29.0	22.8	23.5	21.9	22.3	21.9	21.6	21.2	21.8	21.6	21.3	19.1	18.3	17.5	16.8	16.2	15.5	15.0
16000	24.8	24.0	17.8	18.5	16.9	17.5	17.0	16.7	16.3	15.9	15.6	15.3	14.2	13.5	12.8	12.2	11.6	11.1	10.7
20000	19.5	18.8	12.6	13.2	11.6	12.3	11.8	11.4	11.0	10.5	10.2	9.9	8.9	8.2	7.7	7.2	6.8	6.4	6.1
25000	13.7	13.2	7.1	7.5	6.1	7.0	6.4	5.8	5.3	4.8	4.3	3.9	3.1	2.7	2.3	1.9	1.6	1.3	1.2

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																		
1/3 OCTAVE BAND																		
DISTANCE = 250 FEET																		
NOISE SOURCE/SUBJECT:																		
F-111A NOISE SUPPRESSOR																		
AF32A-13																		
(OPERATION:)																		
(MILITARY POWER 96.5% RPM)																		
(SINGLE ENGINE)																		
(GROUND RUNUP (SUPPRESSED))																		
()																		
METEOROLOGY:																		
TEMP = 59 F																		
BAR PRESS = 29.92 IN HG																		
REL HUMID = 70 %																		
DELTA N = 0.0 DB																		
) IDENTIFICATION:																		
) OMEGA 8.2																		
) TEST 78-779-001																		
) RUN 03																		
) AIRCRAFT CODE 779																		
) OPERATION CODE 00104																		
) PROFILE VERSION A																		
) 28 NOV 79																		
) PAGE C3																		
) BAND CENTER																		
FREQ (HZ)																		
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	76	77	78	77	77	77	76	76	75	73	74	76	76	77	77	78	79	79
63	77	78	78	78	78	77	77	77	76	75	75	75	75	75	75	75	76	76
80	78	79	80	81	83	83	83	83	80	77	78	78	78	78	78	78	77	76
100	80	81	82	82	82	81	81	81	80	80	79	79	79	79	78	78	78	79
125	80	80	81	80	80	79	79	78	77	75	75	76	76	76	76	76	74	73
160	82	83	84	84	85	83	82	81	80	77	74	75	76	76	76	76	73	71
200	86	85	84	86	89	88	87	86	85	82	79	81	82	81	80	79	78	75
250	83	84	86	85	85	85	84	84	83	82	80	80	81	80	79	77	76	75
315	84	84	85	84	84	83	82	81	81	79	78	78	77	76	75	74	73	71
400	82	83	84	83	82	82	81	80	80	79	78	77	77	76	75	74	73	72
500	80	81	82	82	82	81	81	80	78	76	77	77	77	76	75	74	73	72
630	82	82	83	83	82	82	81	80	77	74	76	78	77	76	75	74	72	70
800	84	85	85	85	84	83	82	80	78	75	75	76	75	74	73	72	70	68
1000	79	81	83	83	82	81	79	78	76	74	73	72	71	70	69	68	66	64
1250	78	79	80	80	80	79	77	76	75	74	73	71	69	68	68	68	65	63
1600	76	78	79	79	78	77	76	75	74	73	71	70	69	69	68	68	67	66
2000	79	80	81	80	80	80	78	78	77	76	75	75	74	73	72	71	72	72
2500	81	81	81	81	80	79	78	77	76	76	75	74	74	73	72	71	72	69
3150	76	77	78	78	77	76	75	74	74	73	72	70	70	70	71	71	68	66
4000	78	79	80	80	79	78	77	76	76	76	74	73	72	71	70	70	69	69
5000	76	77	78	77	76	75	74	74	74	74	72	71	69	67	66	64	62	60
6300	74	76	77	76	76	75	74	73	74	75	73	71	68	65	62	59	57	56
8000	75	75	76	76	75	73	72	71	72	72	69	67	64	61	58	55	53	50
10000	74	74	74	74	73	71	70	68	68	67	65	63	59	56	52	48	46	44
OVERALL	94	95	96	96	96	95	94	94	93	91	90	90	89	89	89	89	87	86

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																
NOISE SOURCE/SUBJECT:																
F-111A NOISE SUPPRESSOR																
AF32A-13																
OPERATION:																
MILITARY POWER 96.5% RPM																
SINGLE ENGINE																
GROUND RUNUP (SUPPRESSED)																
METEOROLOGY:																
TEMP = 59 F																
BAR PRESS = 29.92 IN HG																
REL HUMID = 70 %																
DELTA N = 0.0 DB																
DISTANCE																
(FEET)																
ANGLE (DEGREES)																
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310
206	108.4	107.9	108.6	108.4	108.9	108.0	107.1	106.3	105.5	104.2	104.2	102.5	102.1	103.0	104.2	105.6
250	106.2	105.7	106.4	106.2	106.6	105.7	104.8	104.0	103.2	101.9	101.8	100.2	99.8	100.8	102.0	103.4
315	103.9	103.4	104.1	103.9	104.3	103.3	102.5	101.6	100.8	99.5	99.4	97.8	97.5	98.5	99.7	101.1
430	101.5	101.0	101.7	101.5	101.9	100.9	100.0	99.1	98.3	97.0	96.9	95.3	95.2	96.1	97.3	98.8
500	99.0	98.5	99.2	99.0	99.5	98.5	97.5	96.5	95.8	94.4	94.3	92.8	92.7	93.6	94.9	96.3
630	96.4	95.9	96.6	96.4	96.9	95.9	94.9	93.9	93.1	91.7	91.5	90.2	90.1	91.0	92.3	93.7
800	93.6	93.2	93.9	93.7	94.1	93.1	92.1	91.2	90.4	88.9	88.7	87.4	87.3	88.3	89.6	91.0
1000	90.7	90.2	91.0	90.7	91.2	90.2	89.2	88.3	87.6	85.9	85.8	84.5	84.4	85.4	86.7	88.2
1250	87.6	87.1	87.8	87.6	88.1	87.1	86.1	85.2	84.5	82.8	82.6	81.3	81.2	82.3	83.6	85.1
1600	84.2	83.7	84.5	84.2	84.7	83.7	82.7	81.9	81.2	79.5	79.1	77.9	77.9	78.9	80.2	81.7
2000	80.6	80.1	80.8	80.6	81.1	80.1	79.2	78.4	77.7	75.9	75.5	74.3	74.4	75.3	76.6	78.1
2500	76.5	76.1	76.9	76.8	77.4	76.4	75.4	74.5	73.8	72.0	71.5	70.3	70.6	71.2	72.5	74.0
3150	72.6	72.2	73.0	72.9	73.6	72.5	71.5	70.5	69.7	67.6	67.0	65.9	66.7	66.7	67.9	69.4
4000	68.1	67.9	68.7	68.6	69.2	68.1	67.0	66.0	65.1	62.6	61.9	61.0	62.0	61.9	62.2	63.5
5000	63.2	63.3	64.0	64.0	64.4	63.3	62.2	61.2	60.1	57.6	56.3	55.9	56.8	56.5	56.3	56.9
6300	57.9	58.2	59.0	58.9	59.2	58.0	56.8	55.8	54.7	52.2	50.1	50.1	51.1	50.6	50.1	49.6
8000	53.0	53.5	54.3	54.3	54.4	53.3	52.1	51.0	49.9	47.0	44.6	45.1	46.3	45.5	44.7	43.9
10000	47.6	48.4	49.2	49.2	49.2	48.0	46.8	45.4	44.2	41.5	38.9	39.6	40.7	39.5	38.7	37.4
12500	41.1	41.9	42.9	42.7	43.0	41.5	40.3	39.4	38.2	35.5	32.7	33.0	34.2	33.0	31.5	30.5
16000	33.9	34.4	35.6	35.8	36.2	35.0	34.0	33.1	32.2	28.5	24.5	25.2	26.6	25.3	24.1	22.8
20000	24.1	25.4	27.4	27.9	28.8	26.7	25.4	23.7	22.4	17.6	12.7	15.3	16.6	14.3	13.1	11.8
25000	9.8	12.9	14.4	15.1	15.8	13.3	10.6	9.5	8.3	6.6	.9	5.4	6.7	3.2	2.1	.9

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-111A NOISE SUPPRESSOR																			
AF32A-13																			
(OPERATION:)																			
MILITARY POWER 96.5% RPM																			
(SINGLE ENGINE)																			
GROUND RUNUP (SUPPRESSED)																			
()																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
(DELTA N = 0.0 DB)																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 78-779-001																			
AIRCRAFT CODE 779																			
OPERATION CODE 80104																			
PROFILE VERSION A																			
20 NOV 79																			
PAGE F3																			
DISTANCE																			
(FEET)																			
ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.1	93.9	94.8	94.6	94.5	93.5	92.6	91.7	90.7	89.6	88.9	87.9	87.4	86.3	86.7	87.1	87.9	84.8	81.9
250	94.9	91.7	92.6	92.5	92.4	91.4	90.4	89.5	88.6	87.4	86.6	85.7	85.2	84.7	84.6	84.9	85.7	81.8	79.7
315	88.7	89.5	90.4	90.3	90.2	89.2	88.2	87.3	86.4	85.2	84.3	83.5	83.0	82.5	82.4	82.7	83.5	79.6	77.5
400	86.4	87.3	88.2	88.0	87.9	86.9	86.0	85.1	84.1	82.9	82.0	81.2	80.6	80.3	80.2	80.4	81.2	77.4	75.3
500	84.1	85.0	85.9	85.7	85.6	84.6	83.7	82.8	81.8	80.5	79.6	78.8	78.5	78.0	77.9	78.1	78.8	75.1	73.0
630	81.8	82.6	83.5	83.4	83.3	82.3	81.3	80.4	79.5	78.1	77.1	76.4	76.2	75.6	75.5	75.7	76.4	72.7	70.6
800	79.3	80.2	81.1	81.0	80.9	79.9	78.9	78.0	77.1	75.6	74.5	73.9	73.7	73.2	73.0	73.2	73.8	70.2	68.2
1000	76.9	77.7	78.6	78.5	78.4	77.4	76.4	75.5	74.6	73.1	71.9	71.4	71.2	70.7	70.5	70.6	71.2	67.6	65.6
1250	74.3	75.1	76.0	75.9	75.8	74.8	73.8	72.9	72.0	70.4	69.1	68.7	68.6	68.1	67.8	67.8	68.4	64.9	63.8
1600	71.6	72.4	73.3	73.2	73.2	72.2	71.2	70.3	69.3	67.6	66.2	65.9	65.9	65.4	65.0	65.0	65.4	62.1	60.2
2000	68.8	69.7	70.6	70.5	70.4	69.4	68.4	67.5	66.6	64.8	63.3	63.0	63.2	62.5	62.1	62.0	62.2	59.1	57.3
2500	65.8	66.7	67.6	67.5	67.5	66.4	65.4	64.5	63.6	61.7	60.0	59.9	60.2	59.5	59.8	59.7	59.8	55.9	54.1
3150	62.6	63.4	64.3	64.3	64.3	63.2	62.2	61.3	60.4	58.3	56.6	56.5	56.9	56.2	55.6	55.1	55.0	52.4	50.6
4000	59.0	59.9	60.8	60.8	60.8	59.7	58.7	57.7	56.8	54.7	52.8	52.8	53.2	52.4	51.8	51.2	50.9	48.5	46.8
5000	55.0	55.9	56.8	56.8	56.8	55.7	54.7	53.7	52.7	50.5	48.6	48.6	49.1	48.3	47.5	46.9	46.4	44.1	42.4
6300	50.7	51.6	52.5	52.5	52.5	51.4	50.4	49.4	48.4	46.1	44.1	44.2	44.7	43.8	43.0	42.3	41.6	39.6	37.9
8000	46.7	47.6	48.5	48.5	48.5	47.4	46.4	45.5	44.5	42.1	40.0	40.3	40.9	40.0	39.2	38.3	37.6	35.7	34.0
10000	42.4	43.2	44.1	44.0	44.1	43.0	42.1	41.2	40.2	37.8	35.6	36.1	36.8	35.9	35.1	34.2	33.4	31.6	29.9
12500	37.6	38.4	39.2	39.2	39.2	38.2	37.3	36.5	35.6	33.1	30.9	31.5	32.3	31.4	30.6	29.7	28.9	27.1	25.5
16000	32.3	33.0	33.6	33.6	33.9	33.0	32.1	31.3	30.5	28.1	25.8	26.5	27.4	26.5	25.7	24.9	24.0	22.3	20.8
20000	26.5	27.2	27.9	27.9	28.0	27.2	26.4	25.6	24.9	22.5	20.3	21.1	21.9	21.1	20.3	19.5	18.7	17.1	15.6
25000	20.2	20.9	21.6	21.6	21.7	21.0	20.2	19.5	18.8	16.6	14.5	15.2	16.0	15.2	14.5	13.7	12.9	11.5	10.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-111A NOISE SUPPRESSOR																			
AF32A-13																			
(OPERATION:																			
(MILITARY POWER 96.5% RPM																			
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) REL HUMID = 70 %																			
) DELTA N = 0.0 DB																			
) AIRCRAFT CODE 779																			
) OPERATION CODE 00104																			
) PROFILE VERSION A																			
) 28 NOV 79																			
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) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 78-779-001																			
) RUN 03																			
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) TEST 78-779-001																			
) RUN 03																			
) AIRCRAFT CODE 779																			
) OPERATION CODE 00104																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE G3																			
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) PAGE G3																			
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) TEST 78-779-001																			
) RUN 03																			
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) OPERATION CODE 00104																			
) PROFILE VERSION A																			
) 28 NOV 79																			
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) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 78-779-001																			
) RUN 03																			
) AIRCRAFT CODE 779																			
) OPERATION CODE 00104																			
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) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 78-779-001																			
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) IDENTIFICATION:																			
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) TEST 78-779-001																			
) RUN 03																			
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) IDENTIFICATION:																			
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) RUN 03																			
) AIRCRAFT CODE 779																			
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) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 78-779-001																			
) RUN 03																			
) AIRCRAFT CODE 779																			
) OPERATION CODE 00104																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE G3																			
) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 78-779-001																			
) RUN 03																			
) AIRCRAFT CODE 779																			

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-111A NOISE SUPPRESSOR
 AF32A-13
 IDENTIFICATION:
 OMEGA 8.2
 TEST 78-779-801
 RUN 03
 AIRCRAFT CODE 779
 OPERATION CODE 88104
 PROFILE VERSION A
 28 NOV 79
 PAGE J3
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 70 %
 DELTA N = 0.0 DB

	P=PNLT										A=AL										T=ALT									
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
0																														
10																														
20																														
30																														
40																														
50																														
60																														
70																														
80																														
90																														
100																														
110																														
120																														
130																														
140																														
150																														
160																														
170																														
180																														

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)) IDENTIFICATION:	
1/3 OCTAVE BAND) OMEGA 8.2	
DISTANCE = 250 FEET) TEST 78-779-001	
) RUN 84	
NOISE SOURCE/SUBJECT:) METEOROLOGY:	
(F-111A NOISE SUPPRESSOR) TEMP = 59 F	
(AF32A-13) BAR PRESS =29.92 IN HG	
() REL HUMID = 70 %	
() DELTA N = 0.0 DB	
) PAGE C4	
BAND CENTER																					
FREQ (HZ)																				ANGLE (DEGREES)	
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		
50	83	84	85	84	83	83	81	79	77	77	78	78	78	78	78	80	81	82	79		
63	83	83	83	82	81	79	78	78	78	78	78	78	79	79	79	80	81	80	84		
80	84	86	88	88	88	84	82	81	80	80	80	80	80	81	81	83	84	81	88		
100	83	85	87	86	85	84	85	83	80	82	83	82	82	81	81	83	85	82	89		
125	82	83	84	84	83	84	79	78	78	79	80	79	78	78	77	80	83	77	86		
160	83	84	85	84	84	82	79	77	76	76	75	76	76	77	78	80	83	77	86		
200	83	84	84	85	86	85	82	81	80	80	80	79	78	77	77	79	82	77	84		
250	84	86	89	88	87	84	85	84	83	82	81	80	79	78	78	80	83	78	84		
315	86	86	86	86	85	85	86	84	82	79	77	77	78	78	78	78	78	74	79		
400	84	85	86	86	86	87	87	85	84	81	79	79	79	79	79	78	78	75	78		
500	83	84	85	86	86	87	86	84	83	80	78	78	79	79	79	78	77	75	74		
630	85	86	86	87	87	87	86	83	81	79	78	78	77	77	77	77	77	74	72		
800	87	87	88	88	88	85	85	83	81	79	78	77	77	76	75	75	74	72	69		
1000	84	85	87	87	87	85	84	82	80	79	77	76	75	73	72	72	71	70	68		
1250	83	84	85	85	85	84	84	82	79	78	76	75	74	73	72	72	72	71	66		
1600	81	82	83	83	82	83	84	82	79	77	75	74	73	73	72	72	72	72	65		
2000	83	84	84	84	83	83	82	80	78	76	74	74	73	73	72	73	73	78	63		
2500	82	83	84	83	82	82	82	80	78	77	75	75	74	73	72	72	72	72	62		
3150	79	80	81	80	80	80	78	76	74	73	73	72	71	70	69	69	68	68	60		
4000	80	80	81	81	80	80	79	77	76	76	75	74	73	71	70	70	70	70	61		
5000	78	79	79	79	78	77	77	76	74	74	74	72	70	68	66	65	64	62	59		
6300	76	76	77	77	76	77	76	76	75	75	74	71	69	66	64	62	60	59	61		
8000	76	76	77	77	76	76	73	73	72	72	72	69	66	62	59	57	55	54	59		
10000	76	76	76	75	75	76	69	70	70	69	68	64	60	56	53	51	49	49	61		
OVERALL	97	98	99	98	98	97	97	95	93	92	91	91	91	90	90	91	93	90	95		

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
F-111A NOISE SUPPRESSOR																			
AF32A-13																			
IDENTIFICATIONS:																			
OMEGA 8.2																			
TEST 78-779-001																			
RUN 04																			
AIRCRAFT CODE 779																			
OPERATION CODE 00102																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 04																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
DISTANCE																			
(FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.5	110.4	111.2	110.7	110.3	109.7	109.3	107.5	105.8	104.7	104.0	102.9	101.9	101.1	100.4	100.5	100.8	101.1	99.7
250	107.2	108.1	109.0	108.5	108.1	107.4	107.1	105.3	103.6	102.4	101.7	100.6	99.7	98.9	98.1	98.3	98.6	98.9	97.5
315	105.8	105.9	106.7	106.2	105.8	105.1	104.8	103.0	101.2	100.1	99.3	98.2	97.4	96.6	95.9	96.1	96.3	96.7	95.4
400	102.6	103.5	104.4	103.9	103.4	102.8	102.5	100.6	98.9	97.7	96.8	95.8	95.0	94.2	93.5	93.7	94.0	94.3	93.2
500	100.1	101.0	101.9	101.4	101.0	100.3	100.0	98.2	96.4	95.2	94.2	93.3	92.5	91.8	91.0	91.3	91.7	91.9	90.9
630	97.5	98.4	99.3	98.8	98.4	97.7	97.5	95.6	93.8	92.6	91.5	90.7	89.9	89.2	88.5	88.7	89.0	89.4	88.5
800	94.8	95.7	96.6	96.1	95.7	95.0	94.8	92.9	91.1	89.8	88.7	87.9	87.2	86.5	85.8	86.0	86.3	86.8	85.7
1000	91.9	92.8	93.7	93.2	92.8	92.1	91.9	90.0	88.2	86.9	85.8	85.0	84.3	83.6	82.9	83.2	83.5	84.0	82.6
1250	88.8	89.7	90.6	90.1	89.7	89.1	88.9	86.9	85.1	83.8	82.6	81.9	81.2	80.5	79.9	80.1	80.5	81.1	79.2
1600	85.6	86.5	87.3	86.9	86.5	85.8	85.7	83.6	81.9	80.4	79.2	78.5	77.9	77.3	76.9	77.0	77.3	77.9	75.9
2000	82.1	83.0	83.9	83.4	83.0	82.7	82.4	80.5	78.7	77.0	75.5	75.0	74.5	74.1	73.7	73.8	74.8	74.4	72.6
2500	78.3	79.2	80.0	79.8	79.5	79.0	78.7	76.6	74.8	73.1	71.5	71.2	70.8	70.4	70.1	70.1	70.3	70.5	68.6
3150	74.5	75.3	76.2	76.0	75.7	75.0	74.7	72.5	70.7	69.0	67.3	67.0	66.6	66.2	65.9	65.9	66.1	66.2	64.8
4000	70.3	71.1	72.0	71.7	71.5	70.5	70.3	68.0	66.1	64.3	62.7	62.3	62.0	61.6	61.3	61.2	61.4	61.2	59.6
5000	65.6	66.5	67.3	67.1	66.9	65.6	65.3	63.2	61.2	59.3	57.8	57.2	56.9	56.6	56.3	56.1	56.2	55.8	52.9
6300	60.6	61.5	62.3	62.1	61.9	60.4	60.3	58.0	55.9	54.1	52.5	51.8	51.2	51.0	50.7	50.6	50.6	49.4	47.0
8000	56.0	56.9	57.8	57.7	57.5	56.3	56.0	53.6	51.5	49.4	47.2	46.8	46.6	46.2	45.9	45.7	45.9	43.0	42.5
10000	50.8	51.7	52.7	52.4	52.3	51.4	51.1	48.9	46.7	44.3	41.8	41.4	41.1	40.9	40.7	40.2	40.3	37.5	37.1
12500	44.7	45.7	46.8	46.5	46.7	46.1	45.5	43.0	40.8	38.3	35.7	35.5	35.0	34.7	34.6	34.3	33.9	29.9	31.8
16000	37.7	38.6	39.4	39.9	40.5	39.7	39.1	36.9	34.4	31.5	28.5	28.3	27.8	27.7	27.6	27.4	27.2	22.5	21.8
20000	30.0	31.2	32.2	32.8	33.5	32.6	32.0	29.3	26.5	22.8	18.2	18.3	18.5	18.4	18.5	17.4	16.4	10.0	10.9
25000	19.0	20.4	21.8	22.3	23.6	22.8	22.2	18.5	14.5	8.8	8.0	8.3	9.1	9.2	9.4	7.4	5.6		

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TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE
 DISTANCE = 250 FEET
 NOISE SOURCE/SUBJECT:
 F-111A NOISE SUPPRESSOR
 AF32A-13
 IDENTIFICATION:
 OMEGA 8.2
 TEST 78-779-001
 RUN 04
 AIRCRAFT CODE 779
 OPERATION CODE 00102
 PROFILE VERSION A
 28 NOV 79
 PAGE J4
 METEOROLOGY:
 TEMP = 59 F
 BAR PRESS = 29.92 IN HG
 REL HUMID = 79 %
 DELTA N = 0.0 DB

	P=PNLT											T=ALT										
	A=AL																					
	20	30	40	50	60	70	80	90	100	110	120	20	30	40	50	60	70	80	90	100	110	120
ANGLE																						
0																						
10																						
20																						
30																						
40																						
50																						
60																						
70																						
80																						
90																						
100																						
110																						
120																						
130																						
140																						
150																						
160																						
170																						
180																						

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)																			
1/3 OCTAVE BAND																			
DISTANCE = 250 FEET																			
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) AIRCRAFT CODE 779																			
F-111A NOISE SUPPRESSOR (ZONE 5 AFTERBURNER POWER) TEMP = 59 F) OPERATION CODE 00101																			
AF32A-13 (SINGLE ENGINE) BAR PRESS = 29.92 IN HG) PROFILE VERSION A																			
(GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) 28 NOV 79																			
(DELTA N = 0.0 DB) PAGE C5																			
BAND CENTER																			
FREQ (HZ)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	84	85	85	85	86	84	82	81	80	80	81	82	81	81	81	82	83	84	
63	84	85	87	85	84	81	80	79	79	79	81	82	83	83	82	81	82	83	
80	86	87	87	88	84	84	83	82	82	82	84	86	87	88	86	84	83	83	
100	86	87	88	87	86	88	85	83	84	86	85	85	84	84	84	84	83	82	
125	82	83	84	84	84	80	78	77	79	82	80	79	79	79	77	76	76	76	
160	82	84	86	85	84	81	79	76	76	76	76	77	77	76	75	74	74	74	
200	81	82	82	83	84	84	80	79	78	77	77	77	76	76	75	74	73	73	
250	82	83	85	85	83	84	83	82	80	78	78	77	77	77	75	73	73	74	
315	84	85	86	85	84	85	82	80	78	76	77	77	76	75	74	73	72	71	
400	84	84	85	85	86	87	85	84	80	76	76	76	76	77	75	73	72	72	
500	82	83	84	86	88	86	85	84	80	77	78	79	78	77	76	76	75	74	
630	83	85	86	86	85	85	83	81	79	77	77	78	77	76	75	75	73	72	
800	87	88	89	88	86	85	84	82	80	77	77	77	76	75	75	74	72	70	
1000	84	86	87	88	88	86	84	83	81	80	78	77	76	75	75	74	72	70	
1250	84	86	87	88	88	86	85	84	82	80	78	77	76	75	75	74	72	69	
1600	81	83	84	85	86	84	82	80	78	76	75	75	74	72	72	71	69	67	
2000	84	85	85	85	84	82	81	80	78	76	75	74	72	69	69	69	67	65	
2500	82	83	84	84	84	81	82	80	79	77	75	73	71	70	69	69	68	68	
3150	78	80	81	81	79	78	77	75	74	72	71	69	68	66	67	67	65	63	
4000	79	81	83	82	82	79	78	77	76	75	73	71	69	68	68	66	66	63	
5006	77	79	80	80	79	77	77	77	75	72	70	68	66	63	62	61	61	60	
6300	74	76	79	78	78	75	76	77	75	73	70	67	64	60	59	58	57	56	
8000	75	76	78	77	76	75	73	73	71	70	66	62	58	55	53	52	52	51	
10000	75	75	76	76	75	75	70	70	68	66	61	56	53	49	49	48	47	47	
OVERALL	97	98	99	99	99	97	97	95	94	93	92	92	92	92	91	90	90	90	

TABLE: PERCEIVED NOISE LEVEL (PNDB)															IDENTIFICATION:				
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE															) OMEGA 8.2				
															) TEST 78-779-001				
NOISE SOURCE/SUBJECT:															) RUN 05				
(F-111A NOISE SUPPRESSOR															) AIRCRAFT CODE 779				
AF32A-13															) OPERATION CODE 00101				
															) PROFILE VERSION A				
															) 28 NOV 79				
															) PAGE 05				
DISTANCE																			
((FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
															ANGLE (DEGREES)				
(200	109.4	110.4	111.6	111.5	111.4	109.4	109.3	108.0	106.0	105.0	103.5	102.5	101.7	100.4	99.3	98.6	98.1	97.0	96.1
(250	106.9	108.1	109.3	109.2	109.2	107.2	107.1	105.8	104.6	102.8	101.2	100.2	99.5	98.2	97.1	96.3	95.8	94.7	93.9
(315	104.7	105.9	107.0	107.0	106.9	104.9	104.8	103.5	102.3	100.5	98.0	97.9	97.2	95.9	94.8	94.0	93.4	92.4	91.6
(400	102.3	103.5	104.7	104.6	104.6	102.5	102.5	101.1	99.9	98.1	96.4	95.6	94.8	93.6	92.4	91.7	91.0	90.1	89.2
(500	99.9	101.1	102.2	102.1	102.1	100.1	100.0	98.7	97.4	95.6	93.9	93.1	92.4	91.1	90.0	89.3	88.6	87.6	86.7
(630	97.3	98.5	99.7	99.6	99.5	97.5	97.5	96.1	94.8	93.0	91.3	90.5	89.8	88.6	87.4	86.7	86.0	85.1	84.2
(800	94.7	95.8	97.0	96.0	96.0	94.8	94.7	93.4	92.1	90.2	88.6	87.8	87.1	85.9	84.8	84.0	83.3	82.4	81.5
(1000	91.8	93.0	94.1	93.9	93.9	92.0	91.9	90.5	89.2	87.3	85.6	84.9	84.2	83.0	81.9	81.2	80.5	79.6	78.6
(1250	88.8	90.0	91.1	90.9	90.8	88.9	88.9	87.4	86.1	84.2	82.5	81.7	81.1	80.0	79.0	78.3	77.6	76.5	75.6
(1500	85.6	86.7	87.8	87.7	87.5	85.7	85.7	84.1	82.8	80.8	79.1	78.4	77.9	76.9	76.0	75.3	74.6	73.5	72.5
(1750	82.1	83.3	84.4	84.2	84.2	82.4	82.5	80.9	79.4	77.3	75.4	74.9	74.6	73.7	72.8	72.1	71.4	70.3	69.3
(2000	78.3	79.4	80.6	80.4	80.5	78.7	78.7	77.1	75.8	73.4	71.5	71.0	71.1	70.2	69.3	68.5	67.8	66.7	65.6
(2250	74.3	75.6	76.8	76.6	76.5	74.6	74.7	73.0	71.7	69.2	67.3	66.0	66.9	66.0	65.1	64.4	63.7	62.5	61.3
(2500	70.1	71.4	72.6	72.4	72.3	70.3	70.1	68.4	67.2	64.6	62.5	62.3	62.3	61.4	60.4	59.7	59.0	57.7	56.5
(2750	65.5	66.8	68.0	67.8	67.7	65.7	65.3	63.7	62.2	59.7	57.5	57.2	57.2	56.3	55.4	54.6	53.9	52.4	51.0
(3000	60.4	61.8	63.0	62.8	62.7	60.6	60.2	58.6	57.0	54.5	52.0	51.8	51.8	50.8	49.8	48.9	47.9	46.2	44.7
(3250	55.8	57.2	58.5	58.3	58.2	56.1	55.7	54.0	52.5	49.6	46.7	46.5	46.9	45.7	44.7	43.6	42.9	41.1	39.6
(3500	50.4	52.0	53.4	53.2	52.9	50.9	50.8	49.1	47.6	44.1	40.6	40.9	41.4	40.3	39.2	38.1	37.3	35.7	33.6
(3750	44.2	45.7	47.4	47.2	47.4	45.3	44.8	43.3	41.8	38.2	34.3	34.6	35.2	34.2	32.9	32.0	31.1	29.1	27.6
(4000	36.8	38.5	39.9	39.7	39.7	38.5	38.3	37.0	35.4	31.5	26.4	27.4	28.2	27.2	25.9	24.1	22.9	21.1	17.6
(4250	28.5	30.0	31.4	32.3	33.7	31.6	31.1	29.3	27.5	22.2	14.3	15.0	17.4	16.9	15.4	13.1	10.6	9.0	7.4
(4500	16.7	18.3	19.8	22.2	24.6	20.8	20.3	18.5	16.0	8.5	2.3	4.3	6.5	6.6	4.9	2.2			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:										METEOROLOGY:									
(F-111A NOISE SUPPRESSOR										TEMP = 59 F									
(AF32A-13										BAR PRESS = 29.92 IN HG									
(										REL HUMID = 70 %									
(										DELTA N = 0.0 DB									
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.9	98.2	98.4	98.5	98.6	97.3	97.3	95.6	94.1	92.0	90.0	89.1	88.0	87.0	86.1	86.5	86.1	83.2	82.9
250	94.8	96.0	96.3	96.3	96.4	95.2	95.2	93.5	91.9	89.8	87.8	87.0	85.9	84.9	84.0	84.4	84.4	81.1	80.8
315	92.6	93.8	94.1	94.1	94.3	93.0	93.0	91.3	89.7	87.6	85.6	84.8	83.8	82.8	81.9	82.3	81.9	79.0	78.7
400	90.4	91.6	91.8	91.9	92.1	90.8	90.8	89.1	87.5	85.4	83.3	82.6	81.6	80.6	79.7	80.2	79.7	76.8	76.5
500	88.1	89.3	89.6	89.6	89.8	88.6	88.6	86.8	85.2	83.1	81.0	80.3	79.4	78.4	77.5	78.0	77.5	74.6	74.3
630	85.8	87.0	87.2	87.3	87.5	86.3	86.3	84.5	82.9	80.7	78.7	78.0	77.1	76.1	75.3	75.7	75.3	72.3	72.1
800	83.4	84.6	84.9	85.0	85.2	83.9	83.9	82.1	80.5	78.3	76.2	75.6	74.7	73.8	73.0	73.4	73.0	70.0	69.7
1000	81.6	82.2	82.4	82.5	82.7	81.5	81.5	79.7	78.0	75.8	73.7	73.2	72.3	71.4	70.6	71.0	70.6	67.6	67.4
1250	78.4	79.6	79.9	80.0	80.2	79.0	79.0	77.2	75.5	73.2	71.1	70.6	69.8	68.9	68.2	68.5	68.1	65.1	64.9
1600	75.8	77.0	77.2	77.3	77.6	76.4	76.4	74.6	72.9	70.6	68.4	68.0	67.2	66.3	65.6	66.0	65.5	62.6	62.3
2000	73.0	74.2	74.4	74.6	74.9	73.7	73.7	71.9	70.2	67.8	65.6	65.2	64.5	63.7	62.9	63.3	62.8	59.9	59.6
2500	70.1	71.3	71.5	71.7	71.9	70.7	70.7	68.9	67.2	64.8	62.6	62.2	61.6	60.7	60.0	60.4	59.9	56.9	56.6
3150	66.9	68.1	68.3	68.5	68.7	67.5	67.4	65.6	63.9	61.5	59.3	59.0	58.3	57.5	56.8	57.2	56.7	53.7	53.4
4000	63.2	64.4	64.6	64.9	65.0	63.9	63.7	61.9	60.2	57.9	55.6	55.3	54.8	54.0	53.2	53.4	52.9	50.2	49.5
5000	59.0	60.3	61.0	61.1	61.3	59.7	59.4	57.7	56.1	53.7	51.5	51.2	50.7	50.0	49.2	49.2	48.7	46.1	45.2
6300	54.4	55.8	56.7	56.8	57.0	55.3	54.8	53.2	51.6	49.2	47.0	46.7	46.4	45.5	44.9	44.7	44.1	41.8	40.6
8000	50.1	51.4	52.5	52.6	52.8	51.0	50.5	48.9	47.4	45.0	42.7	42.5	42.4	41.6	40.9	40.4	39.8	37.9	36.5
10000	45.3	46.6	47.9	48.0	48.2	46.3	45.8	44.3	42.8	40.3	38.0	37.9	38.0	37.2	36.5	35.8	35.1	33.6	32.1
12500	43.3	44.6	45.9	46.0	46.2	44.3	43.8	42.3	40.8	38.3	36.0	35.9	36.0	35.2	34.5	33.8	33.1	31.6	30.1
16000	34.8	36.0	37.2	37.3	37.6	35.9	35.7	34.2	32.8	30.4	28.1	27.5	27.8	28.1	27.4	26.7	25.9	25.2	23.9
20000	28.7	29.9	31.0	31.2	31.6	30.0	30.0	28.4	27.1	24.3	21.7	22.1	22.5	21.8	21.2	20.4	19.6	18.5	17.5
25000	22.2	23.2	24.2	24.6	25.1	23.6	23.7	22.2	20.9	18.1	15.7	16.1	16.6	16.0	15.4	14.6	13.8	12.9	12.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

F-111A NOISE SUPPRESSOR

AF32A-13

IDENTIFICATION:

OMEGA 8.2

TEST 78-779-001

RUN 05

AIRCRAFT CODE 779

OPERATION CODE 00101

PROFILE VERSION A

28 NOV 79

PAGE J5

METEOLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 78 %

DELTA N = 0.0 DB

P=PNLT

A=AL

T=ALT

	10	20	30	40	50	60	70	80	90	100	110
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

A N G L I N D E G R E E S

NOISE LEVEL IN PNDB OR DBA

[illegible]

NOISE PRODUCED ON THE GROUND BY

T-38 NOISE SUPPRESSOR

OURING GROUND RUN-UP OPERATIONS

TEST 77-733-001
AIRCRAFT CODE: 733
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting

Page

Idle Power, 48% RPM	249-254
Engine Runup, 75% RPM	255-260
Engine Runup, 94% RPM	261-266
Military Power, 99.5% RPM	267-272
Afterburner Power	273-278

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
NORMALIZED SPL AT 250 FEET
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
PERCEIVED NOISE LEVEL
TONE-CORRECTED, PERCEIVED NOISE LEVEL
A-WEIGHTED OVERALL SOUND LEVEL
TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE PATTERNS MEDICAL AIR FORCE RESEARCH LABORATORY, OHIO

[illegible]

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT: T-38 NOISE SUPPRESSOR AF32A-18

OPERATION: IDLE POWER 48% RPM SINGLE ENGINE GROUND RUNUP (SUPPRESSED)

METEOROLOGY: TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB

IDENTIFICATION: OMEGA 8.2 TEST 77-733-801 RUN 01 AIRCRAFT CODE 733 OPERATION CODE 00113 PROFILE VERSION A 28 NOV 79 PAGE J1

ANGLE IN DEGREES	P=PNLT										A=AL										T=ALT										NOISE LEVEL IN PN08 OR DBA									
	0	10	20	30	40	50	60	70	80	90	0	10	20	30	40	50	60	70	80	90	100	0	10	20	30	40	50	60	70	80	90	100								
0	
10		
20		
30		
40		
50		
60		
70		
80		
90		
100		
110		
120		
130		
140		
150		
160		
170		
180		

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																					
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																					
NOISE SOURCE/SUBJECT:																					
(T-38 NOISE SUPPRESSOR																					
(AF32A-18																					
(NOISE SOURCE/SUBJECT:																					
((75X RPM ENGINE RUNUP																					
((SINGLE ENGINE																					
((GROUND RUNUP (SUPPRESSED)																					
((DELTA N = 0.0 DB																					
(DISTANCE																					
((FEET)																					
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
(200	77.8	75.7	74.2	73.3	72.1	71.9	71.9	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
(250	75.5	73.5	72.1	71.3	70.9	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
(315	73.2	71.3	69.9	68.9	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
(400	70.8	69.0	67.8	66.9	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
(500	68.4	66.6	65.5	64.6	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
(630	65.8	64.1	63.2	62.4	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
(800	63.2	61.6	60.8	60.1	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
(1000	60.5	58.9	58.3	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
(1250	57.7	56.1	55.7	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4
(1500	54.7	53.2	52.9	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
(2000	51.7	50.2	50.0	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
(2500	48.5	46.9	46.7	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
(3150	44.9	43.2	43.1	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5
(4000	41.1	39.2	39.1	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
(5000	36.9	34.9	34.7	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
(6300	32.4	30.3	30.1	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
(8000	28.3	26.2	26.5	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9
(10000	24.6	22.8	22.6	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
(12500	19.4	17.5	18.5	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
(15000	14.5	12.9	14.1	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
(20000	9.4	8.2	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
(25000	4.3	3.3	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA) AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																																							
NOISE SOURCE/SUBJECT: T-38 NOISE SUPPRESSOR AF32A-18										(OPERATIONS: (94% RPM POWER RUNUP (SINGLE ENGINE (GROUND RUNUP (SUPPRESSED) (METEOROLOGY: (TEMP = 59 F (BAR PRESS = 29.92 IN HG (REL HUMID = 70 % (DELTA N = 0.0 08 (IDENTIFICATION: (OMEGA 8.2 (TEST 77-733-001 (AIRCRAFT CODE 733 (OPERATION CODE 00109 (PROFILE VERSION A (28 NOV 79 (PAGE 63									
DISTANCE (FEET)																				ANGLE (DEGREES)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180																				
200	79.9	82.3	89.7	80.7	77.0	78.2	74.7	73.3	72.5	72.0	73.7	73.1	73.3	73.0	74.7	77.7	81.0	76.0	74.2																				
250	77.7	80.1	78.6	78.5	74.8	76.0	72.5	71.3	70.5	70.7	71.5	70.9	71.1	71.5	72.4	75.3	78.8	74.4	72.8																				
315	75.5	77.9	76.5	76.2	72.6	73.8	70.4	69.2	68.4	68.6	69.3	68.7	68.9	69.2	70.0	72.9	76.6	72.1	69.7																				
400	73.3	75.6	74.4	74.0	70.4	71.6	68.2	67.1	66.3	66.5	67.0	66.4	66.6	66.9	67.6	70.4	74.3	69.6	67.4																				
500	71.0	73.2	72.2	71.6	68.1	69.2	65.9	64.9	64.1	64.3	64.7	64.1	64.2	64.5	65.0	67.7	72.0	67.1	64.9																				
630	68.6	70.8	69.9	69.2	65.8	66.8	63.6	62.6	61.8	62.0	62.2	61.6	61.7	61.9	62.4	65.0	69.6	64.4	62.4																				
800	66.1	68.3	67.7	66.6	63.3	64.4	61.2	60.2	59.4	59.6	59.7	59.1	59.1	59.3	59.6	62.1	67.2	61.7	59.8																				
1000	63.6	65.7	65.3	64.0	60.8	61.8	58.7	57.7	57.0	57.0	57.1	56.5	56.5	56.6	56.8	59.0	64.0	58.8	57.1																				
1250	60.9	63.0	62.9	61.3	58.2	59.1	56.0	55.0	54.2	54.2	54.3	53.7	53.6	53.7	53.8	55.8	62.2	55.8	54.3																				
1500	58.0	60.3	60.4	58.5	55.4	56.3	53.2	52.1	51.2	51.1	51.4	50.6	50.6	50.6	50.6	52.4	59.6	52.7	51.2																				
2000	55.1	57.4	57.8	55.6	52.6	53.4	50.2	49.1	48.0	47.8	48.2	47.4	47.4	47.3	47.2	48.9	56.9	49.4	47.9																				
2500	51.9	54.2	54.6	52.4	49.5	50.1	47.0	45.8	44.4	44.2	44.8	43.9	43.9	43.7	43.6	45.1	54.0	45.9	44.4																				
3150	48.4	50.7	51.1	48.9	46.1	46.6	43.4	42.1	40.5	40.1	41.1	40.1	40.3	39.9	39.7	41.1	50.9	42.2	40.7																				
4000	44.4	46.5	47.0	45.0	42.3	42.4	39.6	38.1	35.9	35.5	36.8	35.7	36.0	35.5	35.6	36.6	47.2	38.0	36.4																				
5000	40.0	41.8	42.4	40.6	38.1	37.7	35.4	33.8	31.1	30.7	32.3	31.1	31.5	31.0	31.1	32.0	42.9	33.5	31.9																				
6300	35.3	37.0	37.6	36.0	33.7	32.9	31.0	29.4	26.3	25.9	27.5	26.3	26.8	26.3	26.5	27.1	38.3	28.7	27.1																				
8000	31.3	32.7	33.9	32.1	29.0	28.8	27.1	25.0	22.7	22.2	23.4	22.2	22.7	22.4	22.5	22.8	34.1	24.1	22.7																				
10000	27.0	28.1	29.9	27.9	25.7	24.4	23.1	22.1	19.0	18.5	19.1	18.0	18.4	18.4	18.5	18.5	29.6	19.3	18.4																				
12500	22.7	23.7	25.8	23.5	21.3	20.1	18.8	18.1	15.5	15.0	15.1	14.1	14.4	14.7	14.6	14.5	24.9	14.6	14.4																				
15000	18.2	19.1	21.4	18.9	16.8	15.7	14.5	14.1	11.9	11.6	11.2	10.3	10.5	11.0	10.8	10.7	19.8	10.4	10.7																				
20000	13.5	14.2	16.6	14.0	12.0	11.1	10.1	10.0	8.4	8.2	7.5	6.8	6.8	7.5	7.3	7.1	14.2	6.5	7.5																				
25000	9.8	9.3	11.5	9.1	7.3	6.5	6.0	6.0	5.0	4.9	4.0	3.6	3.5	4.2	3.9	3.8	8.3	3.0	4.5																				

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT: T-36 NOISE SUPPRESSOR AF32A-18

OPERATION: 94% RPM POWER RUNUP SINGLE ENGINE GROUND RUNUP (SUPPRESSED)

METEOROLOGY: TEMP = 59 F BAR PRESS = 29.92 IN HG REL HUMID = 78 % DELTA N = 0.0 DB

IDENTIFICATIONS: OMEGA 8.2 TEST 77-733-881 RUN 03 AIRCRAFT CODE 733 OPERATION CODE 88109 PROFILE VERSION A 28 NOV 79 PAGE J3

	PAPMLT											A=AL	T=ALT
	0	10	20	30	40	50	60	70	80	90	100		
0	AT
10	AT
20	AT
30	X
40	X
50	AT
60	X
70	AT
80	AT
90	AT
100	AT
110	AT
120	AT
130	AT
140	AT
150	AT
160	AT
170	AT
180	AT

TABLE: PERCEIVED NOISE LEVEL (PNOL)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
T-38 NOISE SUPPRESSOR																			
AF32A-10																			
(OPERATION:																			
(MILITARY POWER 99.5 % RPM																			
(SINGLE ENGINE																			
(GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
DISTANCE																			
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.4	101.5	102.1	102.8	99.6	98.5	97.8	97.4	94.7	92.9	92.2	91.8	92.1	93.2	96.4	95.1	94.7	94.3	94.0
250	97.1	99.2	99.9	100.6	97.4	96.1	95.4	95.1	92.5	90.6	90.0	89.5	89.9	91.0	94.0	92.8	92.4	92.1	91.8
315	94.8	96.7	97.6	98.3	95.0	93.6	92.9	92.6	90.1	88.1	87.6	87.2	87.5	88.6	91.6	90.5	90.0	89.7	89.5
400	92.3	94.2	95.2	95.9	92.5	91.0	90.3	90.2	87.7	85.6	85.1	84.7	85.0	86.0	89.0	87.9	87.4	87.2	86.9
500	89.8	91.7	92.7	93.4	89.9	88.2	87.7	87.7	85.2	83.3	82.4	82.0	82.3	83.3	86.3	85.3	84.7	84.5	84.3
630	87.8	89.8	90.1	90.8	87.1	85.2	85.1	85.1	82.5	80.4	79.7	79.3	79.6	80.6	83.5	82.5	81.9	81.8	81.6
800	84.1	86.2	87.3	88.0	84.3	82.3	82.3	82.3	79.8	77.6	77.0	76.5	76.8	77.8	80.5	79.7	78.9	79.0	78.8
1000	81.6	83.1	84.4	85.1	81.4	79.4	79.4	79.4	76.9	74.7	74.1	73.7	73.9	74.8	77.3	76.7	75.7	76.1	75.8
1250	77.8	80.2	81.3	82.0	78.3	76.2	76.2	76.2	73.7	71.5	71.0	70.6	70.9	71.7	74.1	73.5	72.5	73.0	72.8
1500	74.7	77.1	77.9	78.6	75.1	72.7	72.7	72.8	70.3	68.0	67.2	66.7	67.0	67.8	70.3	69.7	68.7	69.2	68.9
2000	71.3	73.8	74.3	74.9	71.8	69.1	69.1	69.4	66.6	64.3	63.0	62.4	62.7	63.5	66.0	65.4	64.8	65.3	64.7
2500	67.2	69.8	70.3	70.8	68.1	65.1	65.1	65.4	62.4	60.1	58.0	57.2	57.6	58.7	61.4	60.5	60.5	61.1	60.1
3150	62.6	65.2	65.7	66.0	63.7	60.5	60.5	60.8	57.7	55.3	52.5	50.9	51.2	52.6	56.3	54.5	55.3	56.5	55.4
4000	57.6	60.3	60.9	61.0	58.9	55.4	55.4	55.7	52.4	49.8	46.5	43.6	44.2	46.7	50.1	48.1	49.6	51.4	50.0
5000	52.1	55.0	55.6	55.7	53.6	49.4	49.3	49.7	45.8	42.4	39.7	36.6	37.1	40.8	43.7	41.2	42.9	45.3	44.0
6300	45.8	49.2	49.7	49.7	47.5	42.8	42.3	43.0	38.7	34.5	30.7	24.9	24.7	30.1	35.7	32.6	35.2	37.8	36.7
8000	40.6	43.9	44.6	44.4	42.0	37.0	36.7	36.3	32.5	26.5	23.4	14.8	15.1	20.5	27.7	23.5	28.8	31.9	29.7
10000	34.4	38.3	38.8	38.5	36.2	30.1	29.4	28.9	24.0	14.5	15.3	5.6	5.5	12.7	18.2	13.9	17.7	23.7	22.1
12500	26.7	32.3	32.4	32.4	30.1	21.7	19.5	19.9	13.8	2.5	7.1			4.9	8.7	4.3	7.4	13.2	10.2
16000	17.3	24.7	24.6	24.5	21.3	8.4	9.6	10.8	3.6									2.7	
20000	8.0	14.0	14.0	14.0	10.2			1.0											
25000		3.3	3.4	3.5															

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
T-38 NOISE SUPPRESSOR																			
AF32A-18																			
(OPERATION:																			
(MILITARY POWER 99.5 % RPM																			
(SINGLE ENGINE																			
(GROUND RUNUP (SUPPRESSED)																			
(
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
) AIRCRAFT CODE 733																			
) OPERATION CODE 0104																			
) PROFILE VERSION A																			
) 28 NOV 79																			
) PAGE F4																			
) IDENTIFICATION:																			
) OMEGA 8.2																			
) TEST 77-733-001																			
) RUN 04																			
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WEIGHTED OVERALL SOUND LEVEL (DBA)																			
ANGLE AND DISTANCE FROM SOURCE																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
	8	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.2	87.5	87.6	86.2	85.8	83.7	83.3	83.5	80.4	78.2	75.8	75.0	75.4	76.0	80.7	79.5	80.1	79.7	78.7
250	81.1	85.3	85.4	86.0	83.6	81.5	81.1	81.3	78.2	76.0	73.7	72.9	73.3	74.6	78.4	77.3	77.8	77.5	76.5
300	84.9	83.1	83.2	83.8	81.4	79.2	78.8	79.1	76.0	73.8	71.6	70.8	71.1	72.4	76.0	74.9	75.5	75.3	74.3
350	78.6	80.0	81.0	81.5	79.2	76.9	76.6	76.8	73.7	71.5	69.4	68.6	69.0	70.2	73.6	72.5	73.2	73.1	72.0
400	78.3	78.5	78.7	78.1	76.9	74.5	74.2	74.5	71.4	69.2	67.2	66.4	66.7	67.9	71.1	70.1	70.7	70.7	69.7
450	71.4	76.1	76.3	76.7	74.5	72.0	71.8	72.1	69.0	66.8	64.9	64.1	64.4	65.4	68.5	67.5	68.2	68.3	67.3
500	71.6	73.7	73.9	74.2	72.1	69.5	69.3	69.7	66.6	64.3	62.5	61.7	62.0	62.9	65.8	64.8	65.6	65.9	64.8
550	66.9	71.1	71.4	71.7	69.6	66.9	66.8	67.2	64.1	61.7	60.0	59.2	59.4	60.3	63.1	62.1	62.9	63.3	62.3
600	66.1	68.5	68.8	69.0	67.0	64.3	64.1	64.5	61.4	59.0	57.4	56.5	56.7	57.6	60.1	59.2	60.1	60.6	59.6
650	61.5	65.9	66.0	66.2	64.4	61.5	61.3	61.7	58.6	56.1	54.5	53.5	53.6	54.6	57.0	56.1	57.1	57.8	56.8
700	61.7	63.1	63.2	63.3	61.6	58.6	58.4	58.8	55.7	53.1	51.4	50.2	50.3	51.3	53.8	52.8	53.9	54.9	53.8
750	57.5	60.0	60.1	60.1	58.6	55.5	55.3	55.7	52.5	49.8	48.1	46.6	46.7	47.9	50.3	49.2	50.6	51.8	50.6
800	54.8	56.6	56.6	56.7	55.2	52.2	51.9	52.3	49.1	46.3	44.4	42.7	42.8	44.1	46.6	45.4	47.1	48.5	47.3
850	54.9	52.6	52.7	52.7	51.4	48.3	48.0	48.3	45.2	42.3	40.2	38.3	38.3	39.8	42.4	41.0	43.0	44.6	43.4
900	49.5	48.1	48.4	48.4	47.1	44.0	43.7	43.9	40.8	37.9	35.7	33.7	33.7	35.3	37.9	36.4	38.6	40.4	39.1
950	46.7	43.4	43.8	43.8	42.5	39.3	39.0	39.2	36.2	33.2	31.0	28.9	28.9	30.6	33.1	31.5	33.8	35.8	34.5
1000	36.6	39.3	39.6	39.6	38.3	35.0	34.6	34.7	31.8	28.7	27.1	25.1	25.3	26.8	29.8	27.5	29.4	31.5	30.2
1050	32.2	34.9	35.2	35.1	33.7	30.4	29.9	29.9	27.2	24.0	23.1	21.3	21.6	22.9	24.9	23.5	24.8	26.9	25.8
1100	27.8	30.5	30.6	30.5	29.0	25.7	25.1	25.1	22.6	19.4	19.3	17.8	18.2	19.2	20.9	19.7	20.4	22.3	21.4
1150	23.2	25.7	25.8	25.6	24.1	20.7	20.2	20.2	17.8	14.9	15.5	14.5	14.8	15.6	16.9	16.1	16.0	17.6	17.8
1200	18.4	20.6	20.7	20.4	18.9	15.7	15.2	15.3	13.0	10.8	11.9	11.4	11.6	12.1	13.2	12.7	12.0	13.1	12.8
1250	13.7	15.3	15.5	15.0	13.6	10.8	10.5	10.8	8.6	7.2	8.6	8.4	8.6	8.9	9.8	9.4	8.5	9.2	9.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:

T-38 NOISE SUPPRESSOR

AF32A-18

OPERATIONS:

MILITARY POWER 99.5 % RPM

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY:

TEMP = 59 F

BAR PRESS = 29.92 IN HG

REL HUMID = 70 %

DELTA N = 0.0 DB

IDENTIFICATION:

OMEGA 8.2

TEST 77-733-081

RUN 04

AIRCRAFT CODE 733

OPERATION CODE 00104

PROFILE VERSION A

28 NOV 79

PAGE J4

	10	20	30	40	50	60	70	80	90	100	110
ANGLE	NOISE LEVEL IN PNDB OR DBA										
0									AT		P
10									AT		P
20									X		P
30									AT		P
40									AT		P
50									AT		P
60									AT		P
70									AT		P
80									AT		P
90									AT		P
100									AT		P
110									AT		P
120									AT		P
130									AT		P
140									AT		P
150									AT		P
160									AT		P
170									AT		P
180									AT		P

TABLE: PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
T-38 NOISE SUPPRESSOR																			
AF32A-18																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-733-881																			
RUN 05																			
AIRCRAFT CODE 733																			
OPERATION CODE 00103																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 05																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS =29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.8 DB																			
ANGLE (DEGREES)																			
DISTANCE	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.3	105.9	108.0	107.6	103.9	102.5	102.4	102.6	101.5	99.7	99.6	99.1	100.6	101.0	101.8	101.1	101.8	100.7	103.2
250	101.2	103.6	105.8	105.4	101.8	100.4	100.3	100.5	99.3	97.6	97.5	97.0	98.5	98.9	99.7	99.0	99.7	98.6	98.0
315	99.0	101.2	103.6	103.2	99.6	98.3	98.1	98.3	97.2	95.4	95.4	94.9	96.4	96.8	97.6	96.9	97.5	96.4	95.9
400	96.8	98.9	101.2	100.8	97.4	96.1	95.9	96.1	95.0	93.2	93.2	92.7	94.2	94.5	95.4	94.6	95.3	94.2	93.7
500	94.5	96.5	98.8	98.4	95.1	93.8	93.6	93.8	92.7	91.0	90.9	90.5	92.0	92.2	93.1	92.4	93.0	91.9	91.3
630	92.1	94.0	96.3	95.8	92.6	91.3	91.2	91.4	90.1	88.4	88.5	87.9	89.5	89.6	90.7	89.9	90.5	89.4	88.9
800	89.4	91.3	93.6	93.1	90.0	88.6	88.6	88.7	87.5	85.7	85.9	85.2	86.9	87.0	88.0	87.3	87.9	86.8	86.2
1000	86.6	88.3	90.7	90.2	87.0	85.9	85.6	86.0	84.7	82.9	83.1	82.5	84.1	84.0	84.9	84.2	85.1	83.9	83.3
1250	83.2	85.4	87.5	87.1	84.1	82.5	82.2	82.6	81.3	79.5	79.7	79.0	80.7	80.6	81.5	80.8	81.6	80.5	79.9
1600	79.5	82.3	84.1	83.7	81.0	78.8	78.5	78.9	77.6	75.7	75.9	75.3	76.9	76.8	77.7	77.0	77.9	76.8	76.2
2000	75.4	79.0	80.5	80.0	77.7	74.8	74.4	74.9	73.6	71.6	71.7	71.1	72.7	72.7	73.6	72.8	73.7	72.7	72.1
2500	70.9	75.3	76.4	76.2	74.2	70.8	70.8	70.4	69.1	67.0	67.0	66.5	68.1	68.1	69.0	68.2	69.1	68.1	67.5
3150	66.6	71.2	72.3	72.0	70.1	66.4	65.7	65.6	64.2	61.7	61.7	61.2	62.8	62.9	63.8	62.9	64.0	63.0	62.3
4000	61.8	66.4	67.6	67.3	65.4	61.5	60.7	60.6	59.1	55.5	55.3	54.8	56.6	57.7	57.9	56.7	58.4	57.9	57.0
5000	56.5	61.3	62.4	62.2	60.3	56.2	55.2	55.2	53.6	48.5	48.5	47.8	49.8	51.7	51.9	50.1	53.0	52.5	51.4
6300	50.8	56.0	57.1	56.8	54.9	50.6	49.5	49.3	47.5	41.9	40.9	41.2	43.2	45.3	45.5	43.8	46.7	46.2	45.1
8000	46.0	51.6	52.7	52.3	50.6	45.8	44.6	44.5	42.6	35.6	35.2	35.7	37.8	40.4	40.6	37.9	41.3	41.0	39.3
10000	40.6	46.6	47.7	47.4	45.5	40.4	38.8	38.4	35.9	28.5	27.1	28.3	31.5	34.1	34.2	30.5	34.5	33.9	32.3
12500	33.9	40.9	42.1	41.5	39.8	33.7	31.5	31.3	28.6	17.6	17.5	14.4	21.0	26.0	26.7	19.7	25.5	24.5	22.8
16000	24.6	34.2	34.7	34.0	32.9	26.5	24.1	23.7	17.4	6.7	7.9	0.6	12.3	13.2	13.0	7.6	11.1	8.8	7.0
20000	12.0	25.7	26.7	26.0	25.4	14.1	11.9	10.5	7.0				3.5						
25000		15.0	15.4	14.5	14.1	1.6													

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
T-38 NOISE SUPPRESSOR																			
AF32A-18																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-733-001																			
AIRCRAFT CODE 733																			
OPERATION CODE 00103																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE E5																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 0.0 DB																			
ANGLE (DEGREES)																			
DISTANCE																			
(FEET)																			
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.9	107.3	108.7	108.9	105.5	104.0	103.9	103.8	102.3	100.6	100.9	100.3	101.7	102.2	102.9	102.3	103.1	101.8	101.4
250	102.8	105.0	106.5	106.7	103.4	101.9	101.8	101.7	100.2	98.5	98.8	98.2	99.6	100.1	100.8	100.2	101.0	99.7	99.3
315	100.6	102.6	104.2	104.5	101.2	99.8	99.6	99.5	98.0	96.4	96.7	96.1	97.5	97.9	98.7	98.0	98.8	97.6	97.2
400	98.4	100.3	101.9	102.1	99.0	97.6	97.4	97.3	95.8	94.1	94.5	93.9	95.3	95.7	96.4	95.8	96.6	95.4	94.9
500	96.1	97.8	99.5	99.7	96.7	95.3	95.1	95.0	93.5	91.9	92.2	91.6	93.1	93.3	94.1	93.5	94.3	93.1	92.6
630	93.7	95.3	96.9	97.1	94.3	92.8	92.7	92.6	91.0	89.3	89.8	89.1	90.6	90.8	91.7	91.1	91.9	90.6	90.2
800	91.1	92.7	94.2	94.4	91.6	90.1	90.1	89.9	88.3	86.6	87.2	86.4	88.0	88.1	89.1	88.4	89.2	87.9	87.5
1000	88.3	89.7	91.3	91.5	88.7	87.4	87.1	87.2	85.5	83.9	84.4	83.6	85.2	85.2	86.0	85.4	86.4	85.1	84.6
1250	86.8	88.2	89.4	89.4	86.7	85.4	85.7	85.8	84.2	82.6	83.0	82.2	83.8	83.7	84.6	83.9	85.0	83.7	83.2
1500	84.1	85.6	86.8	86.8	84.1	82.8	83.0	83.1	81.5	79.9	80.4	79.7	81.3	81.2	82.1	81.4	82.5	81.2	80.7
2000	77.1	80.3	81.1	81.3	79.4	78.3	78.9	79.1	77.5	75.9	76.4	75.7	77.3	77.2	78.0	77.3	78.4	77.1	76.6
2500	72.6	76.7	77.1	77.5	75.8	74.7	75.3	75.5	73.9	72.3	72.8	72.1	73.7	73.6	74.4	73.7	74.8	73.5	73.0
3150	68.2	72.5	72.9	73.3	71.7	70.6	71.2	71.4	69.8	68.2	68.7	68.0	69.6	69.5	70.3	69.6	70.7	69.4	68.9
4000	63.1	67.5	68.1	68.3	66.7	65.6	66.2	66.4	64.8	63.2	63.7	63.0	64.6	64.5	65.3	64.6	65.7	64.4	63.9
5000	57.5	62.1	62.8	63.0	61.3	60.2	60.8	61.0	59.4	57.8	58.3	57.6	59.2	59.1	60.0	59.3	60.4	59.1	58.6
6300	51.4	56.5	57.4	57.3	55.6	54.5	55.1	55.3	53.7	52.1	52.6	51.9	53.5	53.4	54.3	53.6	54.7	53.4	52.9
8000	46.3	51.9	52.8	52.6	50.9	49.8	50.4	50.6	49.0	47.4	47.9	47.2	48.8	48.7	49.6	48.9	50.0	48.7	48.2
10000	40.6	46.6	47.7	47.4	45.6	44.5	45.1	45.3	43.7	42.1	42.6	41.9	43.5	43.4	44.3	43.6	44.7	43.4	42.9
12500	35.9	40.9	42.1	41.5	39.8	38.7	39.3	39.5	37.9	36.3	36.8	36.1	37.7	37.6	38.5	37.8	38.9	37.6	37.1
15000	29.6	34.2	34.7	34.0	32.9	32.5	33.1	33.3	31.7	30.1	30.6	30.0	31.6	31.5	32.4	31.7	32.8	31.5	31.0
20000	12.0	25.7	26.7	26.0	25.4	24.1	24.7	24.9	23.3	21.7	22.2	21.5	23.1	23.0	23.9	23.2	24.3	23.0	22.5
25000	15.0	15.4	15.4	14.5	14.1	13.6	14.1	14.3	12.7	11.1	11.6	11.0	12.6	12.5	13.4	12.7	13.8	12.5	12.0

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)																			
AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE																			
NOISE SOURCE/SUBJECT:																			
T-38 NOISE SUPPRESSOR																			
AF32A-18																			
OPERATION:																			
MAX POWER AFTERBURNER																			
SINGLE ENGINE																			
GROUND RUNUP (SUPPRESSED)																			
METEOROLOGY:																			
TEMP = 59 F																			
BAR PRESS = 29.92 IN HG																			
REL HUMID = 70 %																			
DELTA N = 9.0 DB																			
IDENTIFICATION:																			
OMEGA 8.2																			
TEST 77-733-001																			
RUN 05																			
AIRCRAFT CODE 733																			
OPERATION CODE 00103																			
PROFILE VERSION A																			
28 NOV 79																			
PAGE 65																			
ANGLE (DEGREES)																			
DISTANCE (FEET)																			
0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
200	88.2	92.1	93.3	93.6	90.5	87.4	86.9	86.7	85.2	82.3	82.6	82.2	83.5	84.7	85.4	84.6	85.4	84.7	84.0
250	86.1	90.8	91.2	91.4	88.4	85.3	84.8	84.6	83.1	80.3	80.5	80.1	81.4	82.6	83.3	82.4	83.3	82.6	81.9
315	84.8	87.8	89.0	89.2	86.3	83.2	82.6	82.5	80.9	78.1	78.5	78.1	79.3	80.4	81.1	80.3	81.1	80.4	79.7
400	82.8	85.6	86.8	87.0	84.1	81.1	80.4	80.3	78.6	75.0	76.4	76.0	77.2	78.2	78.9	78.1	79.0	78.3	77.6
500	79.6	83.3	84.5	84.7	81.9	78.8	78.2	78.1	76.5	73.8	74.2	73.8	75.0	75.9	76.7	75.8	76.7	76.1	75.3
630	77.3	81.0	82.1	82.3	79.7	76.6	75.9	75.8	74.2	71.5	72.0	71.5	72.8	73.6	74.3	73.5	74.4	73.8	73.1
800	74.9	78.6	79.7	79.9	77.3	74.2	73.6	73.4	71.8	69.1	69.6	69.1	70.4	71.1	71.8	71.1	72.0	71.4	70.7
1000	72.4	76.1	77.2	77.3	74.9	71.7	71.1	71.0	69.4	66.7	67.1	66.6	67.9	68.5	69.2	68.4	69.5	68.9	68.2
1250	69.7	73.6	74.6	74.7	72.4	69.1	68.4	68.3	66.7	63.9	64.3	63.8	65.1	65.7	66.4	65.5	66.7	66.2	65.5
1500	66.9	71.0	71.9	72.0	69.8	66.3	65.6	65.4	63.8	60.9	61.2	60.7	62.0	62.7	63.3	62.4	63.7	63.3	62.6
2000	64.0	68.3	69.1	69.2	67.2	63.4	62.6	62.5	60.8	57.7	57.9	57.4	58.7	59.5	60.0	59.1	60.6	60.3	59.5
2500	60.8	65.2	66.0	66.1	64.3	60.3	59.4	59.2	57.6	54.2	54.2	53.8	55.1	56.1	56.5	55.4	57.3	57.0	56.2
3150	57.3	61.9	62.7	62.7	61.0	56.8	55.9	55.7	54.1	50.4	50.2	49.8	51.2	52.3	52.6	51.5	53.7	53.5	52.6
4000	53.2	57.9	58.9	58.7	56.9	52.7	51.8	51.6	50.1	46.1	45.6	45.2	46.7	48.0	48.2	47.0	49.6	49.5	48.5
5000	48.7	53.4	54.7	54.4	52.5	48.3	47.3	47.1	45.8	41.7	41.0	40.6	42.1	43.5	43.6	42.4	45.2	45.3	44.2
6300	44.8	49.8	50.2	49.7	47.8	43.7	42.6	42.5	41.2	37.0	36.2	35.8	37.4	38.7	38.9	37.7	40.6	40.7	39.6
8000	39.9	44.7	46.1	45.5	43.8	39.6	38.6	38.4	37.2	33.1	32.6	32.2	33.8	34.9	35.2	33.8	36.4	36.5	35.5
10000	35.6	40.4	41.7	41.0	39.5	35.3	34.3	34.1	33.0	29.2	29.0	28.6	30.1	31.1	31.4	30.0	32.1	32.1	31.2
12500	31.5	36.8	37.1	36.4	35.2	31.1	30.1	29.9	28.9	25.5	25.7	25.2	26.7	27.3	27.8	26.5	28.8	28.8	27.8
15000	27.2	31.3	32.1	31.6	30.6	26.8	25.9	25.8	24.7	22.0	22.6	21.9	23.3	23.7	24.3	23.1	25.4	25.4	24.3
20000	23.0	26.3	26.9	26.4	25.7	22.5	21.8	21.7	20.6	18.7	19.5	18.8	20.1	20.1	20.8	19.9	22.4	22.4	21.5
25000	18.9	21.2	21.4	21.1	20.6	18.5	17.9	17.9	16.8	15.7	16.6	15.7	17.1	17.1	17.6	16.9	19.1	19.1	18.1

